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## Address.

### EYE AND NERVOUS SYSTEM.

#### THEIR MUTUAL AND INTIMATE RELATIONSHIP.

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CHICAGO.

To be invited to address a society of the representative physicians of a great State is certainly a great honor and a personal compliment which would awaken very pleasant feelings in the breast of every man. But what pleased me the most was the thought that a society of practitioners was desirous of listening to the address of an oculist; for I thought I could see in this desire an indication that the wide gulf which has so long separated general medicine and ophthalmology is being filled up and that physicians are beginning to realize that a familiarity with the discoveries of modern ophthalmology may often be of material assistance to solve many a difficult problem in their daily practice, just as we oculists have long ago come to the conclusion that we must keep in touch with the progress of general medicine.

When, in the middle of this century, the genius of Helmholtz opened to our gaze the interior of the eyeball, with his ophthalmoscope; when the brilliant mind of Donders unravelled the mysteries of refraction; and Graefe, the greatest master in the art of clinic observation, enriched the pathology and therapy of eye diseases with new discoveries in rapid succession, ophthalmology suddenly became an independent and very progressive branch of medical science. But in cutting loose from surgery, to which it had belonged, it seemed to have become disconnected entirely from medical science; for it goes without saying that physicians have been accustomed to pay little or no attention to the diseases of the eye; to them the domain of the human anatomy enclosed within the orbit was a *terra incognita* like the Dark Continent.

I have often met physicians telling me they did not know anything about the eye and its diseases; they seemed almost proud of their ignorance; or at least took it for granted, as the most natural thing, that a physician was not expected to pay any attention to the eye. But why not? Is not the eye as good and precious a part of the human body as the throat, or the stomach, or the uterus? We have throat specialists, but on this account does any physician think it unnecessary to study the diseases of the throat? And would he ever dream of letting a patient, consulting him for a simple sore throat, go to a specialist for the reason that *he* did not know anything about throat troubles? Would he not fear such admission would hurt his reputation? We have gynecologists too; but I am sure no practitioner is willing and ready to concede to the specialist the female pelvis as his exclusive domain; on the contrary, he tries to keep himself well informed of its diseases and their treatment so that he himself can take care of these cases, unless their very serious nature should demand the services of the more experienced specialist.

Take any organ of the human body and we see physicians pay the closest attention to its diseases; only when they come to the eye their interest suddenly drops to zero; and patients with the simplest kind of an ocular affection are turned away from their door and are compelled either to seek the services of a specialist or take their chances with home remedies, "Christian Science," etc. I believe this indifference of physicians to everything concerning the eye is partly due to the fact that eye diseases, though often fatal to the visual organ, do not kill the patient and hence lack that unmistakable *demonstratio ad oculos* so often furnished by the fatal termination of diseases of other organs to forcibly convince us of their serious effect on the general health.

Every physician understands that gastric disorders, liver complaints, kidney diseases, in fact, the diseases of any organ which plays a vital rôle in the assimilation of food or in the elimination of the waste products, must naturally alter the chemic qualities of the blood and unfavorably affect the nutrition and functions of the whole organism. Hence physicians regard even the most trifling disorder of these organs as worthy of their full attention, and in cases of general malnutrition carefully examine the various organs for the purpose of locating, if possible, the cause of the constitutional disturbance.

But that little thing, the eyeball, which has nothing to do with the biologic processes of nutrition, is not suspected of ever causing any disturbance reaching beyond the bony confines of the orbit. The eye has never been included among the possible disturbing factors affecting the health of an individual, and physicians have become accustomed to exclude it from the list of their investigations.

But the bony walls of the orbit do not isolate the eye from the rest of the body; it stands in constant and intimate communion with it; it is frequently affected by diseases of distant organs and though its diseases do not threaten or shorten a man's life, they often inflict so much suffering that the sufferer may well feel disposed to doubt whether life is worth living.

The intimate relation existing between the eye and other parts of the organism is most strikingly illustrated by the influence diseases of the nervous system so frequently have upon the eye and, vice versa, ocular disturbances have upon the nervous system. And it is to this highly interesting subject I wish to turn your kind attention for a few minutes.

Do not fear, that I shall put your endurance, phys-

*An Address before the Kansas State Medical Society, Topeka, May 4, 1899.

ical or mental, to a severe test; do not apprehend you will have to listen to a lecture highly charged with confusing technicalities and bewildering Greco-Latin terms which so luxuriantly thrive on the rich soil of ophthalmology. I have always thought it showed very poor judgment when in a general society an oculist read a paper very learnedly discussing technic details, which to be sure were highly interesting to the specialists, but far beyond the scope of the general practitioners; and the bored and tired expression I have noticed on the faces of the audience on such occasions rises now vividly before my eyes as a reminder not to commit a similar blunder. I shall not lead you through an ophthalmic maze that would puzzle and fatigue you; for my desire is not to smother, but to awaken, your interest in questions relating to the eye; and I know I shall succeed if I present to you in plain language a few plain facts showing the influence of nervous diseases upon the eye, and then, another series of facts illustrating the influence of ocular diseases on the nervous system.

### INFLUENCE OF DISEASES OF THE NERVOUS SYSTEM ON THE EYE.

Diseases of the nervous system affect the eye very differently, according to the different nature of the neurosis; functional neuroses cause functional disturbances, organic nervous diseases produce structural changes in the eye.

The *functional neuroses* in which you may look for ocular disturbances are neurasthenia and hysteria, while it is a noteworthy fact that in chorea, though twitchings of the facial muscles are almost always present, the ocular muscles are very rarely involved; and epilepsy also does not affect the eye, except that during the paroxysms its muscles participate in the general convulsions.

In *neurasthenia* ocular disturbances belong to the most frequent and prominent complaints. Neurasthenics can not endure much physical or mental exertion; their nerve force is quickly exhausted, their muscles become easily tired, and a little work is apt to cause a nervous collapse with aches and pains all over the body. The eye muscles are not exempt from this general debility and, since reading, writing, sewing and similar occupations require the services of muscles (chiefly the ciliary and internal recti muscles), neurasthenics experience all the symptoms due to the quick fatigue of these muscles; though they may enjoy normal vision and normal refraction, they can read but a very short time because their vision becomes blurred (fatigue of ciliary muscle) or unsteady and vacillating (fatigue of the recti muscles) and their eyes and head soon begin to ache. This incapacity for prolonged near work is, of course, much accentuated if the eye muscles are unduly taxed by existing anomalies of refraction.

Another visual disturbance often accompanies the paroxysms of the neurasthenic headache or migraine, popularly called "sick headache." In probably one-half of the cases of migraine the attack is ushered in by peculiar visual phenomena; either the patient can see but one-half of the object, for instance, only the right half of a person's face (hemianopsia), or his vision is suddenly blotted out entirely (scotoma or "blind spell"); or he sees passing before his eyes dazzling flashes of light and luminous rings constantly changing in color like a kaleidoscopic play (scintillating scotoma). Patients are often greatly alarmed by these blind spells; it is, therefore, well for you to understand their purely neurotic character and harmless nature, and to know that they are not indicative of any danger to the sight; but at the same time it is well always to bear in mind that acute glaucoma is also ushered in by sudden obscuration of vision and violent headache with nausea and vomiting. In migraine the blind spell usually lasts but a few minutes to half an hour and precedes the headache and nausea, and the eye presents an absolute normal appearance; in glaucoma, the blind spell occurs simultaneously with the headache and lasts as long as the headache, and the eye shows by its engorged blood-vessels, enlarged pupil and increased tension, the unmistakable signs of glaucoma.

*Hysteria* is so closely related to neurasthenia that we are not surprised by finding the ocular disturbances of the one should also be frequently noticed in the other neurosis. And indeed are quick fatigue of the eyes and visual disturbances of varying degrees, from slight impairment to total blindness, no uncommon symptoms in hysteria. This hysteric amblyopia, as it is called, may affect both eyes, but usually it is confined to one eye. It occurs quite suddenly, varies in degrees almost daily and disappears as suddenly as it came; and the eye-ground shows no ophthalmoscopic changes.

The *organic diseases* of the nerve centers affect the eye in various ways, but the optic nerve is the chief sufferer. In acute meningitis the optic nerves are frequently involved in the inflammation, which, extending to the optic disc, becomes directly visible to us by means of the ophthalmoscope. In doubtful cases the ophthalmoscopic evidence of optic neuritis is a very valuable means of deciding the diagnosis; and in tubercular meningitis its specific nature may sometimes be determined conclusively by the ophthalmoscopic discovery of tubercles in the eye-ground. Optic neuritis is also frequent in brain abscess, especially when they have attained considerable size. The inflammation is often unequal in both eyes, but it does not follow that the more marked neuritis is always found in the right eye if the abscess is in the right hemisphere, and in the left eye if the abscess is in the left hemisphere; hence, we can not draw any positive conclusion from the unequal intensity of the neuritis as to the probable site of the abscess.

That the cerebral irritation produced by sunstroke may affect the optic nerves was first pointed out by me, twenty years ago.[1] The optic neuritis in these cases, seems, however, to be of a rather mild and transient type, not likely to lead to atrophy of the optic nerve and permanent damage of vision. In all my cases, at least, the inflammation readily subsided, and the eyes recovered normal acuity of vision.

Tumors in the brain frequently lead to great impairment of vision or total blindness. In the majority of cases the ophthalmoscope shows an enormous venous congestion and edematous swelling of the optic papilla; and though this condition, known as "choked disk," is occasionally found with other diseases, its occurrence in connection with cerebral tumors is so prevailing that the ophthalmoscope may often decide the question of the nature of the existing brain lesion. Tumors growing at the base of the brain may cause, by direct pressure, paralysis of one or the other motor nerves supplying the eye muscles;

[1] Notes on Intraocular Lesions Produced by Sunstroke. American Journal of the Medical Sciences, July, 1879.

they may also cause blindness of one eye by pressure on its optic nerve, or affect in a peculiar way the vision of both eyes by pressure on one optic tract. And we are often enabled to determine the anatomic location of the morbid growth by the eye symptoms.

Atrophy of the optic nerves and paralysis of ocular muscles are also frequent in brain syphilis, in those degenerative processes known as general paralysis and multiple sclerosis, and especially in locomotor ataxia. In the latter disease ocular disturbances make their appearance often at a very early stage before other symptoms of ataxia are manifest. This is particularly true of the paralysis of the ocular muscles; so that a paralysis of a muscle suddenly appearing without cause in an apparently healthy individual should always give rise to the suspicion of beginning tabes, especially if this paralysis is of short duration and reappears either in the same or any other ocular muscle at various intervals. A very characteristic and constant ocular symptom of locomotor ataxia is the contracted pupil—often unequal in both eyes—and its failure to react to light, while the eyes show no signs of inflammation—past or present—of the iris, which is the only local disease causing contraction and non-reaction of the pupil.

A great many more facts could be cited illustrating the influence of nervous diseases on the eye; but I have promised you not to become too technic and tiresome, and I have therefore restricted this review to the most prominent landmarks, believing they are sufficiently strong and conclusive proofs to convince you that nervous diseases are a frequent source of functional and organic disturbances of the visual organ.

Let us now turn our attention to the reverse side of the relation existing between the nervous system and the eye. Let us see whether we may find as good and strong evidence to prove that eye troubles are a frequent cause of nervous disorders.

### EFFECT OF OCULAR AFFECTIONS ON THE NERVOUS SYSTEM.

When speaking of the "blind spells" in sick headaches, I have already called your attention to the fact that acute glaucoma causes one-sided headache, nausea and vomiting of the same violence as migraine. I wish to impress this fact once more on your mind, because I have met with several cases in which the glaucomatous origin of the headache and gastric disturbance had not been recognized, and those nervous symptoms had been treated as neuralgia, migraine or gastric troubles. One of these was a particularly sad one. A woman whose right eye had been blind for many years was seized by the most violent left-sided headache, nausea and frequent vomiting. Her physician pronounced her trouble gastritis and "sick headache"; and even when the patient told him her sight was becoming poorer every day, he paid no attention to the eye, but assured her that the sight would return as soon as her stomach trouble was cured and the neuralgia relieved. Having implicit faith in her physician, the poor woman abided by his word, and though her sight was soon gone, she patiently endured the constant agonizing pain day and night and hopefully waited for the day when the dark cloud would be lifted from her eye. For two weary months she suffered and hoped; but finally her endurance was exhausted, and, much against the will of her physician, she consulted an oculist. Alas, too late! the glaucoma had done its deadly work only too well; although the iridectomy promptly reduced the high tension and at once relieved the headache and all the other symptoms, the sight did not return; the optic nerve-fibers had been completely destroyed by the long-lasting high tension.

Can you imagine a more shocking result of a physician's blunder for which there is absolutely no excuse; for the signs of acute glaucoma—the engorged veins of the eyeball, the dull cornea, the dilated and immobile pupil, and the high tension—are so plainly marked out that he who only takes the trouble of looking at the eye can not fail to see them.

Many inflammations of the eye cause more or less disturbance in the various branches of the trigeminus. The dull brow-ache of corneal inflammation, the frontal headache in simple conjunctivitis after reading, the throbbing neuralgias of the jaws in iritis, and splitting headaches in cyclitis are too well-known instances of the disturbing influence of ocular affections on the nerves. Not so well known is the fact that even a simple stye may cause severe headache, and easily be overlooked as the etiologic factor of the headache.

But the inflamed eye may occasionally cause a more serious neurosis than headache. As a case in point, let me give you a brief history of a case which has recently been reported.[2] A young man of regular habits and good health had an iritis of the left eye after an attack of influenza in December, 1891. In spite of atropin treatment the iritis persisted and soon the patient was seized with fainting spells and convulsions which induced him, in February, 1892, to go to the hospital. There his nervous seizures were recognized as typic epileptic paroxyms which became more frequent and intense in spite of the use of bromids and hypnotic suggestions. As the patient's left eye still showed signs of inflammation, an oculist was called, who advised the enucleation of the eye, not because he suspected it to be in any way responsible for the epilepsy, but because he wished to relieve the patient of all further troubles which the persistent inflammation of the hopelessly blind eye was sure to cause in the future. The eye was enucleated in April, and the epileptic attacks ceased at once after the operation, never to return.

Observations like this are highly interesting and instructive, but very rare; and we can not be surprised that the eye was not suspected as the disturbing element in this case. In most instances, however, the inflammation, which exerts a disturbing influence on the nerves, attracts the attention of both the patient and the physician, and it is not difficult for the latter to recognize the causal relation between the ocular inflammation and the nerve pains.

But in the largest number of nervous affections caused by the eye, this little organ presents a perfectly healthy and normal appearance; it looks so natural and innocent that no one would suspect it to be capable of doing so much mischief; and though in a number of instances the patient is inclined to the belief that there is some connection between the eyes and his nervous troubles because he finds they are either brought on or greatly aggravated by the use of the eyes, yet a great many patients have no such experience; they have no fault to find with their eyes and think it an absurd idea when they are told the cause of their nervous sufferings may possibly be found in their eyes.

[2] Klinische Monatsbl. f. Augenheilkunde, August, 1898.

Oculists have long been acquainted with the fact that in many people the use of the eyes for near work —reading, writing, sewing, etc.—was invariably followed by pain in the eyes and violent headache. In the majority of these cases the distressing symptoms were found to be the result of an overtaxed accommodation; and in a smaller number they were attributed to the strained effort of the weak internal recti muscles to maintain the proper convergence of the eyes at the reading distance. And as the accommodation—that is the adjustment of the sight for short distances—is also accomplished by muscular action (the ciliary muscle) it is evident that in all these cases the headaches are caused by the overexertion of ocular muscles or by *eye-strain*, which is the generally accepted term to designate an excessive demand on either the ciliary muscle or any of the extrinsic muscles of the eye.

Very soon, however, it was found that eye-strain was not limited to the near work, but covered a much wider field. It was found that far-sighted and astigmatic persons can see things at any distance with distinctness, only by unconsciously straining their accommodation; their ciliary muscles are incessantly at work from the moment they wake up in the morning until they go to sleep at night, while under normal optic conditions of the eyes distant objects are seen distinctly without the aid of the accommodation, and the ciliary muscles are set to work only to adjust the vision for the near range. But the eye with normal refraction is greatly in the minority; the far-sighted and astigmatic eyes constitute the majority. It is, therefore, not surprising that these optic conditions (far-sightedness and astigmatism) are encountered as a frequent cause of eye-strain.

And as to the extrinsic muscles it was soon learned that the causes for strained action are not restricted to the internal recti muscles, but are just as frequently, if not oftener, found in the other muscles.

The easy and accurate execution of those rapid, lightning-like movements of the eyeball in looking from one object to another; the easy and steady maintenance of our gaze on an object, require a mechanism of well-balanced muscular forces. The perfect equilibrium of these forces alone renders it possible that both eyes look straight at a distant object when all the muscles are in a state of relaxation or physiologic rest. If, from whatever cause, one muscle becomes stronger or weaker than its antagonist, the muscular balance is disturbed and the eye naturally inclines to turn toward the stronger muscle. If the disturbance is considerable, the eyeball is permanently turned toward the stronger muscle, as in convergent squint; but if the disproportion of the muscular tensions is not very great, the tendency of the eyeball to turn toward the stronger muscle is opposed and the eyes held straight in the interest of binocular vision by a strenuous effort of the antagonistic muscle; the externus thus opposes the tendency of the eye to turn inward; the internus opposes its tendency outward, the inferior rectus its upward and the superior rectus its downward tendency. Now imagine this muscular struggle going on from morning till night and day after day, and you will understand that the disturbed equilibrium of the eye muscles furnishes another important and frequent source of eye strain.

As every muscular contraction represents the expenditure of nerve force, it is evident that the continuous activity of the ciliary muscle of the far-sighted and astigmatic eye and the constant effort of the extrinsic muscles to restore the lost equilibrium consume daily a much greater amount of nerve force than nature has provided for the use of the eyes. And as a person who daily spends more money than he earns will inevitably become bankrupt, so this excessive expenditure of nerve force is likely, sooner or later, to lead to nervous exhaustion manifesting itself in the various forms of functional nervous derangements.

That such are the frequent consequences of eye strain has been proven beyond the possibility of a doubt; and the evidence is accumulating so fast that the time is near at hand when physicians will consider it their duty to make a critic examination of the eyes in the persistent headaches of school children; in intractable headaches of adults; in nervous dyspepsia and unaccountable insomnia; in neurasthenia and even in chorea and epilepsy.

The recognition of eye strain as a frequent cause of all these functional nervous disorders and the possibility of relieving untold numbers of sufferers by removing the cause of eye strain is one of the greatest achievements of modern ophthalmology; an achievement of which the medical profession of this country has particular reasons to be proud, because it is chiefly and preeminently the work of American ophthalmologists.

## Original Articles.

### COLORED CHILDREN: A PSYCHO-PHYSICAL STUDY.

BY ARTHUR MACDONALD.
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In all new lines of inquiry it is a general principle to regard the results as more or less tentative, according to the number of persons experimented upon.

In this study the results depend upon averages which are valuable according to the whole numbers from which the averages are made. In many instances these numbers are not as large as one would desire. We hope this may induce some investigator to make experiments upon larger numbers.

SPECIAL STUDY OF NINETY-ONE COLORED CHILDREN.

Instruments used: The calipers (Fig. 1) are used for measuring the length and width of head.

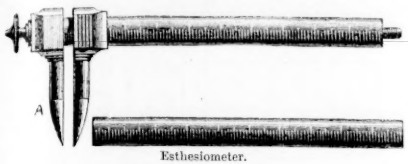
The right end of the calipers (R) is held at the root of the nose; the one measuring watches the scale while he brings the left point of the calipers over the back and middle of the head, thus finding the maximum length of head. The width of the head is measured and verified in a similar way to that of the length. In these measurements a mistake of a millimeter is allowed. In scientific measurements only a half millimeter is allowed.

ESTHESIOMETER.

The esthesiometer measures the degree of ability to distinguish points on the skin by the sense of touch. This is called the sense of locality, which varies in acuteness according to the mobility of the part.

The instrument (Fig. 2) consists of a round brass rod on which is a scale. One point (A) is fastened on the rod, the other point slides on the rod. The subject, with eyes closed, is asked, when the two points

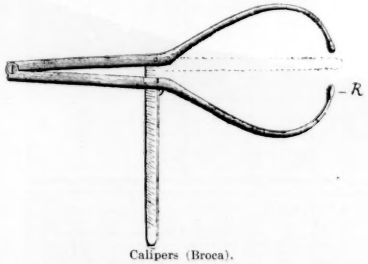
are made to gently touch the skin simultaneously, how many points he feels, one or two. When he is in doubt the distance between the two points can be read on the scale. This distance is an approximate measure of his sense of locality on the skin.




Esthesiometer.

THERMESTHESIOMETER.

The thermesthesiometer (Fig. 3), designed by Eulenburg, consists of two thermometers fastened together. The left-hand thermometer (A) was heated until it registered about ten degrees more than the




Calipers (Broca).

right-hand one (B). The two thermometers were placed upon the palmar surface of the wrist in a line at right angles to the length of the wrist. The subject was asked which was the warmer, and on replying

Thermesthesiometer (Eulenberg).

correctly, the thermometers were held on the skin until the subject could not tell which was warmer. At this instant the difference in degrees between the thermometers was read. This difference may be regarded as a *relative* least sensibility to heat.

After the measurements had all been made by the writer, the teachers were requested to mark the pupils bright, dull, or average in general, and also to mark them in those special studies in which they were bright, dull, or average; and when in doubt to mark them average, so that there might be less liability to error in regard to the bright and dull, which are the two classes we specially desire to compare.

We regret that the number of colored children measured is so small. In making comparisons, therefore, due account must be taken of this fact.

TABLE I.—Colored Boys.

| Class. | Number of cases. | Average age. Yr. | Mo. | Cephalic index. | | Least sensibility to locality. Right wrist. Mm. | Left wrist. Mm. | Strength of grasp. Right hand. Kilos. | Left hand. Kilos. | Least sensibility to heat. Right wrist. | Left wrist. R. | Long-headed (dolichocephalic). Per cent. | Medium (mesocephalic). Per cent. | Broad-headed (brachycephalic). Per cent. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bright. | 18 | 12 | 11 | Dolicho. | 4 | 240 | 228 | 531 | 525 | 35 35 | 32 00 | 35 | 52 | 13 |
| | | | | Meso. | 9 | 14 1 | 15 5 | 19 5 | 18 1 | 1 96 | 1 78 | | | |
| | | | | Brachy. | 4 | | | | | | | | | |
| Dull. | 10 | 13 | 2 | Dolicho. | 4 | 141 | 140 | 178 | 165 | 25 00 | 18 35 | 40 | 50 | 10 |
| | | | | Meso. | 1 | 14 1 | 14 0 | 17 8 | 16 5 | 2 30 | 1 83 | | | |
| | | | | Brachy. | 1 | | | | | | | | | |
| Average. | 5 | 14 | 5 | Dolicho. | 2 | 78 | 77 | 122 | 117 | 10 00 | 8 25 | 40 | 60 | . |
| | | | | Meso. | 3 | 15 6 | 15 4 | 24 4 | 23 4 | 2 00 | 1 65 | | | |
| | | | | Brachy. | 0 | | | | | | | | | |
| Total. | 33 | . | . | Dolicho. | 10 | 459 | 446 | 651 | 607 | 68 25 | 58 50 | . | . | . |
| | | | | Meso. | 17 | | | | | | | | | |
| | | | | Brachy. | 5 | | | | | | | | | |
| Average for all. | . | 13 | 3 | . | . | 14 3 | 13 9 | 19 7 | 18 4 | 2 07 | 1 77 | 33 | 60 | 15 |
| Unruly *a* | 5 | 14 | 5 | Dolicho. | 2 | 78 | 77 | 122 | 117 | 10 00 | 8 25 | 40 | 60 | . |
| | | | | Meso. | 3 | 15 6 | 15 4 | 24 4 | 23 4 | 2 00 | 1 65 | | | |
| | | | | Brachy. | 0 | | | | | | | | | |

*a* The unruly are included among the bright, dull or average; so they are placed alone.

The bright colored boys are more sensitive to heat than the dull colored boys (Table 1).

The bright colored girls are more sensitive to locality than the dull. The dull colored girls have a stronger hand-grasp than the bright. Comparing the colored girls with the white girls, they are less sensitive to locality than the white girls, but much more sensitive to heat. Comparing the colored boys and girls, the boys are more sensitive both to locality and heat. Colored boys (Table 1) are remarkably sensitive to heat on the left wrist.

COLORED CHILDREN BEFORE AND AFTER PUBERTY.

While the number of colored children measured is comparatively small, yet it may be interesting to note some differences indicated in Table 3.

Among the boys and girls the per cent. of long heads is much greater after puberty than before. This is also true of the white boys, but not of the white girls. The colored boys are more sensitive to heat and locality after puberty than before. The reverse is true with the white boys, but the colored girls, like the white girls, are less sensitive after puberty.

TABLE 2.—Colored Girls.

| Class. | Number of cases. | Average age. Yr. | Mo. | Cephalic index. | Least sensibility to locality. Right wrist. Mm. | Left wrist. Mm. | Strength of grasp. Right hand. Kilos. | Left hand. Kilos. | Least sensibility to heat. Right wrist. R. | Left wrist. R. | Long-headed (dolichocephalic). Per cent. | Medium (mesocephalic). Per cent. | Broad-headed (brachycephalic). Per cent. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bright. | 33 | 12 | 6 | Dolicho.. 5<br>Meso.... 20<br>Brachy.. 8 | 499<br>15.1 | 471<br>14.3 | 547<br>16.6 | 519<br>15.7 | 94.75<br>2.87 | 78.62<br>2.38 | 11 | 66 | 23 |
| Dull. | 18 | 13 | 8 | Dolicho.. 8<br>Meso.... 7<br>Brachy.. 3 | 289<br>16.1 | 261<br>14.5 | 321<br>17.8 | 302<br>16.8 | 46.00<br>2.56 | 51.00<br>2.83 | 46 | 38 | 16 |
| Average. | 3 | 15 | 6 | Dolicho.. 0<br>Meso.... 2<br>Brachy.. 1 | 36<br>12.0 | 30<br>10.0 | 63<br>21.0 | 57<br>19.0 | 4.62<br>1.54 | 5.62<br>1.87 | | | |
| Unruly. | 4 | 13 | 8 | Dolicho.. 0<br>Meso.... 4<br>Brachy.. 0 | 62<br>15.5 | 60<br>15.0 | 72<br>18.0 | 68<br>17.0 | 7.75<br>1.94 | 8.25<br>2.06 | | | |
| Total. | 58 | | | Dolicho..13<br>Meso.... 33<br>Brachy..12 | 886 | 822 | 1003 | 946 | 153.12 | 143.49 | | | |
| Average. | | 13 | 1 | | 15.3 | 14.2 | 17.3 | 16.3 | 2.64 | 2.47 | 27 | 52 | 21 |

TABLE 3.—Colored Children before and after Puberty.

| Divisions according to puberty and sex. | Number of cases. | Average age. Yrs. | Mos. | Dolichocephalic. Per cent. | Mesocephalic. Per cent. | Brachycephalic. Per cent. | Least sensibility to locality. Right wrist. Mm. | Left wrist. Mm. | Strength of grasp. Right hand. Kilos. | Left hand. Kilos. | Least sensibility to heat. Right wrist. R. | Left wrist. R. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All colored boys: | | | | | | | | | | | | |
| Before puberty. | 22 | 12 | 2 | 27 | 55 | 18 | 14.1 | 13.6 | 19.0 | 17.9 | 2.42 | 2.00 |
| After puberty. | 11 | 15 | 5 | 40 | 50 | 10 | 13.5 | 13.4 | 21.3 | 18.5 | 1.55 | 1.32 |
| All colored girls: | | | | | | | | | | | | |
| Before puberty. | 15 | 10 | 1 | 13 | 47 | 40 | 14.3 | 12.9 | 11.7 | 10.9 | 2.53 | 2.05 |
| After puberty. | 36 | 14 | 2 | 31 | 55 | 14 | 15.9 | 15.0 | 19.3 | 18.3 | 2.85 | 2.75 |

TABLE 4.—Percentage of ability in different studies, computed on number reported.

COLORED GIRLS.

| Limit of age. From— Yrs. | Mos. | To— Yrs. | Mos. | Mental divisions. | 11 Arithmetic. | 15 Drawing. | 16 Geography. | 21 History. | 22 Language and English. | 26 Music. | 28 Penmanship. | 34 Reading. | 36 Spelling. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 0 | 6 | 6 | Bright | 27 | | | | 43 | 31 | 27 | 41 | 42 |
| | | | | Dull | 54 | | | | 33 | 15 | 40 | 41 | 37 |
| | | | | Average | 19 | | | | 24 | 54 | 33 | 18 | 21 |
| 6 | 7 | 7 | 6 | Bright | 30 | | | | 27 | 34 | 54 | 35 | 39 |
| | | | | Dull | 33 | | | | 36 | 18 | 33 | 29 | 24 |
| | | | | Average | 37 | | | | 36 | 55 | 33 | 17 | 41 |
| 7 | 7 | 8 | 6 | Bright | 67 | 60 | | | 70 | 83 | 65 | 80 | 77 |
| | | | | Dull | 23 | 10 | | | 18 | 9 | 19 | 17 | 14 |
| | | | | Average | 10 | 30 | | | 12 | 16 | 16 | 3 | 9 |
| 8 | 7 | 9 | 6 | Bright | 67 | 40 | | | 70 | 45 | 62 | 84 | 67 |
| | | | | Dull | 22 | 20 | | | 14 | 20 | 15 | 10 | 17 |
| | | | | Average | 11 | 40 | | | 16 | 35 | 23 | 6 | 16 |
| 9 | 7 | 10 | 6 | Bright | 72 | 33 | 78 | | 77 | 50 | 65 | 74 | 62 |
| | | | | Dull | 22 | 27 | 15 | | 13 | 12 | 14 | 16 | 16 |
| | | | | Average | 6 | 40 | 7 | | 10 | 38 | 21 | 10 | 22 |
| 10 | 7 | 11 | 6 | Bright | 72 | 36 | 79 | | 71 | 47 | 63 | 76 | 64 |
| | | | | Dull | 21 | 32 | 17 | | 21 | 16 | 13 | 16 | 25 |
| | | | | Average | 7 | 32 | 4 | 8 | 37 | 24 | 8 | 8 | 11 |
| 11 | 7 | 12 | 6 | Bright | 68 | 37 | 57 | | 74 | 70 | 64 | 66 | 56 |
| | | | | Dull | 27 | 37 | 34 | | 16 | 12 | 16 | 23 | 30 |
| | | | | Average | 5 | 26 | 9 | | 10 | 18 | 20 | 11 | 14 |
| 12 | 7 | 13 | 6 | Bright | 71 | 41 | 79 | 64 | 70 | | 65 | 67 | 69 |
| | | | | Dull | 23 | 18 | 17 | 24 | 21 | | 3 | 25 | 21 |
| | | | | Average | 6 | 41 | 4 | 12 | 9 | | 32 | 8 | 10 |
| 13 | 7 | 14 | 6 | Bright | 64 | 50 | 53 | 70 | 50 | 42 | 53 | 65 | 55 |
| | | | | Dull | 32 | 31 | 31 | 24 | 41 | 16 | 15 | 24 | 23 |
| | | | | Average | 4 | 19 | 16 | 6 | 9 | 42 | 32 | 11 | 22 |
| 14 | 7 | 15 | 6 | Bright | 62 | 40 | 60 | 63 | 60 | 13 | 48 | 53 | 51 |
| | | | | Dull | 32 | 7 | 26 | 29 | 20 | 50 | 13 | 25 | 28 |
| | | | | Average | 6 | 53 | 14 | 8 | 20 | 37 | 39 | 22 | 21 |
| 15 | 7 | 16 | 6 | Bright | 49 | 53 | 27 | 60 | 74 | | 38 | 41 | 38 |
| | | | | Dull | 47 | 18 | 39 | 22 | 16 | | 6 | 18 | 24 |
| | | | | Average | 4 | 29 | 34 | 18 | 10 | | 56 | 41 | 38 |
| 16 | 7 | 17 | 6 | Bright | 46 | 22 | 42 | 62 | 64 | | | 45 | 50 |
| | | | | Dull | 50 | 11 | 32 | 19 | 18 | | | 22 | 20 |
| | | | | Average | 4 | 67 | 26 | 19 | 18 | | | 33 | 30 |

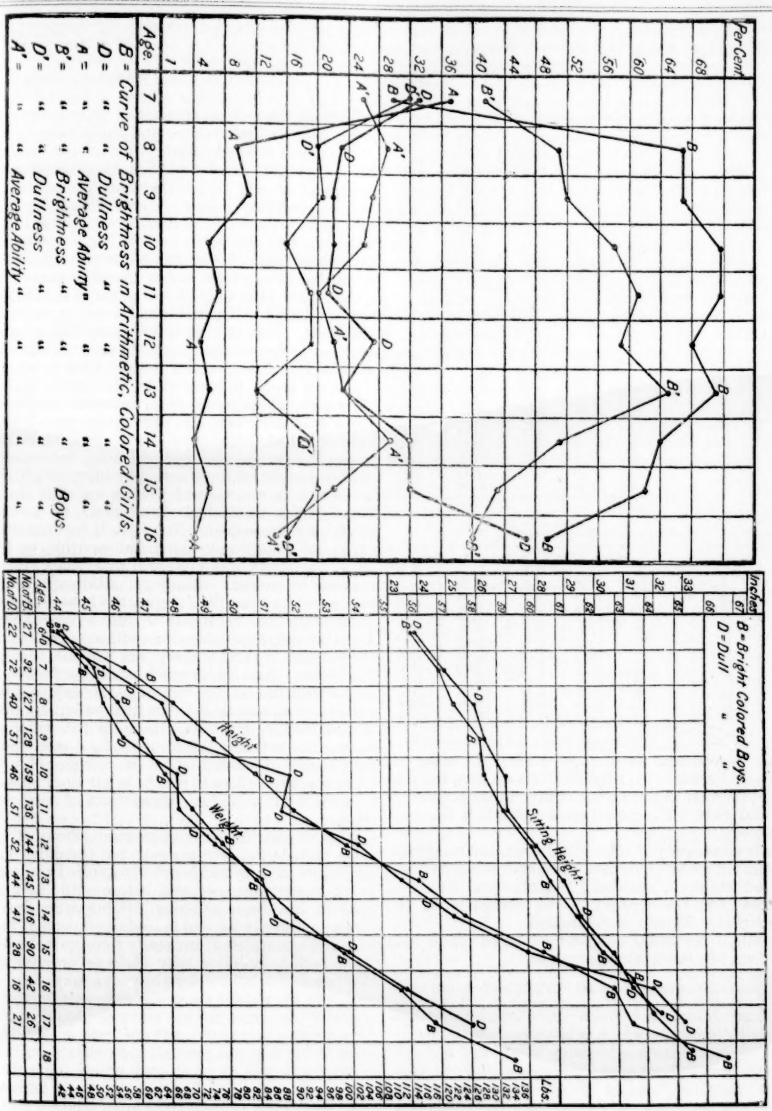
TABLE 5.—Percentage of ability in different studies, computed on number reported.

COLORED BOYS.

| Limit of age. From— Yrs. | Mos. | To— Yrs. | Mos. | Mental divisions. | 9 All studies. | 11 Arithmetic. | 15 Drawing. | 16 Geography. | 21 History. | 22 Language and English. | 26 Music. | 28 Penmanship. | 34 Reading. | 36 Spelling. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 0 | 6 | 6 | Bright | 37 | 41 | | | | 39 | 64 | 22 | 50 | 39 |
| | | | | Dull | 42 | 36 | | | | 25 | 9 | 31 | 26 | 22 |
| | | | | Average | 21 | 23 | | | | 36 | 27 | 47 | 24 | 39 |
| 6 | 7 | 7 | 6 | Bright | 28 | 42 | 13 | | | 33 | 29 | 40 | 51 | 40 |
| | | | | Dull | 48 | 32 | 37 | | | 33 | 18 | 29 | 25 | 17 |
| | | | | Average | 24 | 26 | 50 | | | 34 | 53 | 31 | 24 | 43 |
| 7 | 7 | 8 | 6 | Bright | 46 | 51 | 25 | 34 | | 50 | 35 | 53 | 57 | 54 |
| | | | | Dull | 20 | 20 | 17 | 33 | | 10 | 26 | 17 | 17 | 17 |
| | | | | Average | 34 | 29 | 58 | 33 | | 40 | 39 | 30 | 26 | 29 |
| 8 | 7 | 9 | 6 | Bright | 52 | 52 | 35 | 59 | | 43 | 36 | 42 | 51 | 48 |
| | | | | Dull | 20 | 21 | 26 | 6 | | 17 | 32 | 16 | 22 | 31 |
| | | | | Average | 28 | 27 | 39 | 35 | | 40 | 32 | 42 | 27 | 21 |
| 9 | 7 | 10 | 6 | Bright | 46 | 58 | 32 | 53 | 14 | 48 | 40 | 44 | 54 | 48 |
| | | | | Dull | 21 | 16 | 24 | 11 | 29 | 9 | 20 | 9 | 18 | 20 |
| | | | | Average | 33 | 26 | 44 | 36 | 57 | 43 | 40 | 47 | 31 | 32 |
| 10 | 7 | 11 | 6 | Bright | 47 | 61 | 43 | 61 | | 44 | 26 | 52 | 53 | 42 |
| | | | | Dull | 22 | 19 | 25 | 16 | | 18 | 11 | 15 | 24 | 24 |
| | | | | Average | 31 | 20 | 32 | 23 | | 38 | 63 | 33 | 23 | 34 |
| 11 | 7 | 12 | 6 | Bright | 51 | 59 | 41 | 37 | | 41 | 29 | 44 | 46 | 38 |
| | | | | Dull | 25 | 19 | 15 | 19 | | 21 | 12 | 10 | 27 | 29 |
| | | | | Average | 24 | 22 | 44 | 44 | | 38 | 59 | 46 | 27 | 33 |
| 12 | 7 | 13 | 6 | Bright | 53 | 65 | 64 | 47 | 59 | 46 | 27 | 50 | 45 | 39 |
| | | | | Dull | 18 | 12 | 12 | 11 | 13 | 12 | 18 | 7 | 24 | 16 |
| | | | | Average | 29 | 23 | 24 | 42 | 28 | 42 | 55 | 43 | 31 | 45 |
| 13 | 7 | 14 | 6 | Bright | 51 | 51 | 54 | 42 | 43 | 45 | 26 | 36 | 39 | 39 |
| | | | | Dull | 19 | 19 | 12 | 9 | 14 | 14 | 16 | 14 | 20 | 19 |
| | | | | Average | 30 | 30 | 34 | 49 | 43 | 41 | 58 | 50 | 41 | 42 |
| 14 | 7 | 15 | 6 | Bright | 43 | 58 | 58 | 46 | 61 | 43 | 50 | 57 | 34 | 34 |
| | | | | Dull | 16 | 20 | 12 | 14 | 11 | 16 | 30 | 24 | 28 | 28 |
| | | | | Average | 41 | 22 | 34 | 40 | 28 | 41 | 20 | 19 | 38 | 38 |
| 15 | 7 | 16 | 6 | Bright | 40 | 48 | 54 | 36 | 45 | 28 | 50 | 47 | 41 | 24 |
| | | | | Dull | 15 | 16 | 14 | 12 | 7 | 18 | 12 | 40 | 16 | 27 |
| | | | | Average | 45 | 36 | 32 | 62 | 48 | 54 | 38 | 13 | 43 | 49 |
| 16 | 7 | 18 | 6 | Bright | 39 | 37 | 58 | 48 | 51 | 38 | | 35 | 29 | 31 |
| | | | | Dull | 22 | 27 | 6 | 16 | 9 | 19 | | 20 | 12 | 23 |
| | | | | Average | 39 | 36 | 36 | 36 | 40 | 43 | | 45 | 59 | 46 |

II.—STUDY OF FIVE THOUSAND FOUR HUNDRED AND FIFTY-SEVEN COLORED CHILDREN.

Diagram 1, which is based upon the measurements made by the the teachers, shows that, while the bright colored boys excel the dull colored boys in height, the dull excel the bright in sitting height. This may possibly indicate a relation of concomitancy of dulness and long-bodiedness for colored children.


B = Curve of Brightness in Arithmetic, Colored Girls.
D = " " Dullness " " " "
A = " " Average Ability " " "
B' = " " Brightness " " Boys.
D' = " " Dullness " " "
A' = " " Average Ability " " "
Per Cent
Age
Inches
B = Bright Colored Boys.
D = Dull " "
Standing Height
Weight
Height

ABILITY AND AGE IN COLORED CHILDREN.

The relation of age to ability in colored children is quite variable, but from a general survey of Tables 4 and 5 it may be said that the colored children generally increase in brightness as age increases, whereas the white children decrease in brightness as age increases. It would seem that the cause of this difference in the colored children is racial.

There is a sudden increase and high percentage of brightness in all studies in colored girls at the age of 8, with a corresponding decrease in dulness and average ability, but much more marked in average ability. At this age the colored boys also show an increase in brightness, but it is not so marked as in the case of the girls. The boys differ from the girls also at this age and afterward in having a much

TABLE 6.—Colored Boys, Bright.

| Limits of different ages. From— | | To— | | Total number of pupils. | Average height. | Average sitting height. | Average weight. | Average circumference of head. |
|---|---|---|---|---|---|---|---|---|
| Yrs. | Mos. | Yrs. | Mos. | | Inches. | Inches. | Pounds. | Inches. |
| 5 | 1 | 6 | 6 | 27 | 44.08 | 25.89 | 42.58 | 20.35 |
| 6 | 7 | 7 | 6 | 92 | 46.48 | 24.70 | 49.93 | 20.34 |
| 7 | 7 | 8 | 6 | 127 | 48.09 | 25.29 | 55.33 | 20.67 |
| 8 | 7 | 9 | 6 | 128 | 49.58 | 26.06 | 60.14 | 20.78 |
| 9 | 7 | 10 | 6 | 159 | 50.83 | 26.26 | 65.32 | 20.88 |
| 10 | 7 | 11 | 6 | 136 | 52.06 | 26.81 | 70.39 | 20.90 |
| 11 | 7 | 12 | 6 | 144 | 53.79 | 27.75 | 76.16 | 20.84 |
| 12 | 7 | 13 | 6 | 145 | 56.35 | 28.38 | 83.92 | 21.13 |
| 13 | 7 | 14 | 6 | 116 | 57.82 | 29.31 | 91.37 | 21.34 |
| 14 | 7 | 15 | 6 | 90 | 60.56 | 30.20 | 100.52 | 21.37 |
| 15 | 7 | 16 | 5 | 42 | 62.92 | 31.28 | 112.18 | 21.48 |
| 16 | 7 | 17 | 6 | 26 | 63.55 | 31.91 | 119.85 | 22.05 |
| 17 | 7 | 18 | 6 | 18 | 67.46 | 33.28 | 134.61 | 22.28 |
| 18 | 7 | 19 | 4 | 4 | 67.41 | 35.17 | 136.50 | 22.25 |
| 19 | 8 | 19 | 11 | 3 | 63.75 | 32.92 | 124.67 | 21.50 |
| | | | | 1,257 | | | | |

TABLE 7.—Colored Boys, Dull.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 5 | 2 | 6 | 6 | 22 | 43.39 | 23.90 | 43.29 | 19.91 |
| 6 | 7 | 7 | 6 | 72 | 45.76 | 24.77 | 51.39 | 20.19 |
| 7 | 7 | 8 | 6 | 40 | 47.68 | 25.72 | 57.18 | 20.51 |
| 8 | 7 | 9 | 6 | 51 | 48.32 | 26.09 | 56.65 | 20.22 |
| 9 | 7 | 10 | 6 | 46 | 52.06 | 26.92 | 67.15 | 20.61 |
| 10 | 7 | 11 | 6 | 51 | 51.66 | 26.94 | 67.94 | 20.85 |
| 11 | 9 | 12 | 6 | 52 | 54.29 | 27.92 | 75.79 | 21.06 |
| 12 | 7 | 13 | 6 | 44 | 55.71 | 28.85 | 84.10 | 20.90 |
| 13 | 7 | 14 | 6 | 41 | 57.57 | 29.32 | 86.85 | 21.25 |
| 14 | 7 | 15 | 6 | 28 | 60.12 | 30.64 | 100.61 | 21.30 |
| 15 | 7 | 16 | 6 | 16 | 64.28 | 31.30 | 113.83 | 21.79 |
| 16 | 7 | 18 | 1 | 21 | 65.32 | 32.04 | 126.14 | 21.89 |
| 18 | 11 | 22 | 11 | 2 | 67.38 | . . . | 151.00 | 22.25 |
| | | | | 486 | | | | |

TABLE 8.—Colored Boys, Average.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 5 | 0 | 6 | 6 | 24 | 44.99 | 24.36 | 44.44 | 20.43 |
| 6 | 7 | 7 | 6 | 82 | 45.91 | 24.71 | 49.19 | 20.30 |
| 7 | 7 | 8 | 6 | 121 | 47.40 | 25.25 | 53.23 | 20.35 |
| 8 | 7 | 9 | 6 | 124 | 49.33 | 26.25 | 58.85 | 20.74 |
| 9 | 7 | 10 | 6 | 130 | 51.19 | 26.69 | 64.31 | 20.81 |
| 10 | 7 | 11 | 6 | 84 | 52.43 | 27.03 | 70.50 | 21.08 |
| 11 | 7 | 12 | 6 | 90 | 54.01 | 28.43 | 76.91 | 20.82 |
| 12 | 7 | 13 | 6 | 132 | 55.91 | 28.41 | 82.83 | 21.06 |
| 13 | 7 | 14 | 6 | 125 | 58.25 | 29.43 | 91.76 | 21.31 |
| 14 | 7 | 15 | 6 | 102 | 59.66 | 30.44 | 99.11 | 21.47 |
| 15 | 7 | 16 | 6 | 66 | 62.99 | 31.22 | 114.17 | 21.35 |
| 16 | 7 | 17 | 6 | 41 | 64.79 | 32.99 | 121.61 | 21.91 |
| 17 | 7 | 18 | 5 | 25 | 66.72 | 34.11 | 130.23 | 21.74 |
| 18 | 7 | 19 | 5 | 5 | 66.40 | 34.00 | 129.00 | 22.20 |
| 19 | 7 | 20 | 6 | 5 | 65.90 | 40.38 | 128.20 | 22.40 |
| | | | | 1,156 | | | | |

higher percentage in average ability in most all branches of study. To illustrate this we give the preceding diagram of curves for ability in arithmetic for boys and girls. The report on arithmetic is the most complete.

For further study of colored children, and their comparisons with white children, the reader is referred to a work on children, entitled "Experimental Study of Children" (by the writer), to be published by the United States Bureau of Education.

We add a few other conclusions, based upon data to be found in the work referred to.

### OTHER CONCLUSIONS AS TO COLORED CHILDREN.

Colored children are much more sensitive to heat than white children, which probably means that their power of discrimination is much better, and not that they suffer more from heat. Colored girls have larger circumference of head at all ages than white girls. White children not only have a greater standing height than colored children, but their sitting height is still greater; yet colored children have a greater weight than white children, that is, white children, relatively to their height, are longer bodied than colored children. The percentage of long-headedness (dolicocephaly) among colored boys is more than double that of white boys. This may be due to racial influence.

## CATHETER-INFLATION OF TYMPANUM.

### ITS VALUE AND TECHNIC.

BY B. ALEXANDER RANDALL, M.D.
PHILADELPHIA.

In these days of advance in all departments of medicine, it is naturally demanded that there should be marked and radical improvement in otology, which the surgeon is hardly willing to acknowledge as a branch of surgery except when he himself invades it, not always wisely. It is charged with being the least successful branch of the healing art; and is judged by most exacting standards, such as are never applied to other branches. Many who are thus ready to criticize its shortcomings seem rather proud to answer to any questioning, that they "know nothing about the ear"; and the laity are if possible still more ignorant or misinformed. It is in this atmosphere that most of the younger generation of otologists are growing up, half-ashamed of the specialty which they have chosen. They are much influenced by the spreading tide of rhinology, whose more ardent advocates would lead all mankind by the nose and cure their every ill by operative measures within that organ; and while arrogating to themselves the otologic field, too rarely look closely into its anatomy and pathology, forgetting that it is but a narrow view of the ear which is obtainable through the Eustachian tube alone, by however so skilful a rhinoscopist. Not that it is unessential to give good attention to the nasal cavities, as have so many otologists, like Voltolini, who count among the makers of modern rhinology, although they have rarely been among the extremists whose ardor at times outruns the rational limits of truly advanced practice. But rhinologic methods alone will not greatly advance the success of aural surgery, nor are all changes for the better. And while much of the profession is apt to vie with the laity in running after any new-fangled cure for deafness, be it operation, patent ear-drum or phonomassage machine, there is too much belief among the rational thinking medical men that radical changes of method must be introduced into otologic practice before it can be other than a backward branch, if not an actual opprobrium of modern medicine.

This impression is common even among otologists, if we include the younger set; and the older methods are deprecated or half-heartedly applied and varied at every suggestion, perhaps before skill in any one method has been attained. Some who find their powers naturally limited in undoing mischief that has long been completed are ready to drop these lines of work and to practice only such as promise greater brilliancy of result. Certainly one may thus better maintain the pose of a successful practitioner, like the operator who cares for his statistic record more than for suffering humanity; but one may surely do much good in his day and generation by striving after small successes as well as great and practicing with loyal conscientiousness such old methods as have shown their usefulness in long and varied trial.

Whether catheterization of the Eustachian tube dates back to Guyot or Cleland, or had its real beginning in this century, one must risk being considered a fossil if advocating its use in the same way as then pointed out, especially if he always employs the auscultation tube of Toynbee, often discarded as useless by "advanced men." So many methods have been discovered and re-discovered, of doing it or substituting it

in highly scientific but usually less efficient manner, seeking by variation of method a success which more persistent adherence to the older plan would generally better attain, that anyone trying to simplify the procedure instead of adding complications is likely to find scant attention. The expert can always devise and probably employ these variations with fair success; but he will too often lead astray the less practiced man who tries to follow his lead. Difficult cases will from time to time be met which must not be abandoned as impossible until every resource has been exhausted, and for these, faucial catheterization or the aid of the rhinoscopic mirror may need to be called in, as Voltolini did when he made the first practical application of Czermak's new method. Placing the catheter in the tube-mouth by posterior rhinoscopic aid was fully set forth by Semeleder in 1862; and his work, as translated by Caswell (Wood, New York, 1866), contains much in this and other directions which later men had better read there than publish as original.

Eustachian catheterization ought to be generally practicable to every practitioner and to be little more difficult than the Politzer inflation. But let it be first well-understood that it is a procedure, not an "operation," and it will be clearer than it is that pain and bloodshed have no proper place in it; and the use of cocain, sometimes indiscriminately recommended, is as needless. Yet many of the instruments offered are wretched caricatures of what they should be—mere bougies, so inefficient is their nearly capillary lumen. This is at times in spite of ample external diameter—the thickness of wall giving a clumsy stiffness that seems to invite "thumby" handling. An instrument suited to most cases has a length of 15 cm. at most, with a diameter of 2 mm. internally and externally of 3mm. It is best made of virgin silver, to which any desired bend can be instantly given by the fingers. Over the gaslight it quickly heats to a glow, leaving no doubt as to its sterilization; although if water is at hand for boiling, it will doubtless survive such usage longer. If properly smooth at the beak and rightly handled, it has no need of a bulbous tip, although such a one is probably no disadvantage if it does subtract from the lumen. The Politzer bag may be used for this as for other inflations; but it should have a rounded tip which will not enter the expanded end of the catheter as is usual—it should afford a "ball-and-socket joint" by merely resting against the tube. It is then needless to have any interposed rubber tubing, or any valve in the bag, since there is no jarring in withdrawing to refill. A new bag may have a valve that works automatically, but it rarely acts well for any length of time.

In passing the catheter, the anatomy of the parts must be known and not groped after. The nares should, as a matter of course, have been thoroughly studied, back and front; and the eye should follow the illumination into the anterior nares as the instrument is entered. The nose-tip should be pressed up by the thumb of the one hand while the catheter is grasped at its extreme end by the thumb and index of the other. A good view is obtained of where the instrument is to go and of any obstacles that must be circumvented, while a delicate yet controlling hold of the instrument is gained that need not be varied until it is in place and can be lightly but steadily held there by the left hand supported on the nose-dorsum. As the incisor crest just within the vestibule is higher than the tip of the nose, not only must the beak be carried up over this and then brought down on the floor by raising the outer end of the instrument, but the nose-tip must be held up to allow the straight part of the tube to pass horizontally back along the floor. (Fig. 1.) This passing back can usually be done, in the absence of spurs or other obstructions, almost by the weight of the catheter, followed as much as guided by the thumb and finger. The beak can be felt to slide along the nasal floor until it sinks upon the soft palate; then a turn outward through a third of a circle will generally place it instantly in the mouth of the Eustachian tube. If the patient is straining and will not at command relax and open the mouth, the velum may be held too high and too rigidly to give us a satisfactory touch of the back edge of the hard palate. We must then seek the equidistant landmark, the lower back edge of the vomer—by turning the beak inward and withdrawing until its curve catches distinctly upon the edge, then rotate down and out through more than half a circle to enter the tube-mouth. Every catheterization must pass, if possible, along the nasal floor until the pharynx is entered; then it is much the simplest to turn at once into the tube-mouth without delay or needless irritation.

Fig. 1.—Introduction of the catheter with nose-tip raised and the beak carried in over the incisor crest. The nasal floor along which it is to pass is outlined as well as the tube mouth.

It is in fashion to believe the tube mouth a variable locality; but it is probably almost as little variable as the choanæ, which Harrison Allen showed to be very constant parts of the skull, generally symmetric. The error, which has only dubious clinic evidence in its support, has arisen from using vague and unrelated landmarks for its localization, principally soft tissues. Why we should try to nauseate a patient by touching the back wall of his pharynx or irritate the Rosenmuller fossa and drag a catheter-beak over the posterior lip of the tube to snap it painfully into the ostium with bruising of both, has never been made clear. When we touch the back wall it may be high up and

on a thick pad of adenoid tissue actually in advance of the tube-mouth, or it may be low down and on thin tissues merely covering the vertebra, 5 cm. beyond the tube entrance. If no note has been made of depressions or elevations of the nasal floor, the tube-mouth may seem unduly high or low; but a finger behind the palate would probably demonstrate that it holds its usual position in relation to the edge of the palate bone, the only true landmark. This is far surer as a test than the posterior rhinoscopy, for it is very difficult to determine the relation by this means—as witness the wide variation in the pictures which are put forward as portraying this region.

But entering the mouth of the Eustachian tube is only a beginning. Our purpose is to inflate the tympanum through the tube (Fig. 2.); and of success in this there is no certain criterion except the sound heard by means of the auscultation tube. This should therefore connect the examiner's ear with the examined as a first step toward our procedure. Through it we can have many unimportant and possibly confusing sounds from the pharynx—distant, however, and much such as the other ear hears unaided; but when the air makes its impact on the inner side of the patient's drumhead, we seem to *feel* it upon our own. If after full success we displace the catheter into Rosenmuller's fossa and inflate against the back wall of the tube nearly an inch nearer the tympanum, the sound is apt to be louder, and most patients will claim, as also as to many a failure, that it is clearly felt in the ear. To gain real inflation the catheter must fairly correspond with the

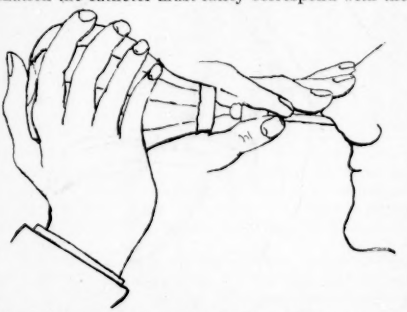


Fig. 2.—Catheter in position held by left hand with support upon the nose, while the Politzer bag is used to inflate.

lumen of the tube, and the most difficult cases are often those with no stenosis, but on the contrary, an overlarge naris and tube-mouth where we have too much room in which to lose the catheter-beak. Rhinoscopy can not help us here, except in assuring us of what we ought to know, that the tube is wide and that the catheter is in it; faucial catheterization is apt to be less definite and efficient than nasal. We can only listen carefully while inflating with varying positions of the catheter, use a little more forcible inflation—if sure that the orifice has not been wounded, lest we have emphysema—or have the patient swallow so as to open the tube while the levator of the palate may press the catheter into exact position.

Yet after succeeding, what have we done better than by Politzer inflation? The mechanic effect may have been precisely the same, unless in being limited to the one ear better than closing the other ear enabled us to prevent the entrance of air into it in Politzerization.

We can perhaps use more force in the effort to overcome tubal stenosis, but this is of doubtful safety; and in no small number of the cases most in need of our aid the secondary involvement of the nervous apparatus makes it especially liable to injury by an overdoing of the inflation. Catheterization permits then, a more manageable exercise of just the requisite pressure to give success, and in less rude and brief impact, which it is easy to make continuous if desired by use of a double-bulb apparatus; but mere air has been found to have only limited value, and all manner of liquids and vapors have been employed as medicinal adjuvants to the mechanic effect of the inflation.

As there may be more or less essential atrophy of the tympanic mucous membrane, the stimulation of this is a requisite to any resolution. Of the abnormal state of the tympanic lining a simple experiment of Löwenberg's gives valuable proof. If we blow a little chloroform vapor into the drum cavity of a sclerotic case, it will generally feel cool instead of hot, even though there are indications of slight previous congestion, or though the case be only in its incipiency. The awaking to better vitality, which is needful in these cases, must be controllable or we may do more harm than good, and the employment must be easy if we are to expect patients to submit. Iodin in some form is probably our best medicament, but Delstanche and others of large experience are warm advocates of injections of fluid petrolatum. For the employment of such medical measures every sort of elaborate apparatus, often excellent, has been devised, but most of them are superfluous. Vaporizing substances may be placed in the Politzer bag or in an interposed chamber, but it is much easier to simply fill the bag with air saturated with the desired substance by merely thrusting its nozzle into a wide-mouthed bottle containing it. So, too, as to injections, whether to wash out the tube-mouth or to penetrate the tube or tympanum, no syringe is better than the ordinary atomizer, which must be at hand to clear the nares before any form of the inflation (Fig. 3). Through the catheter this gives as good a spray as can be asked, and after a few blasts, has deposited enough of the fluid upon the walls of catheter and of the tube beyond to give a very coarse spray or an actual injection. True, such sprays generally feel cool, even though the fluid is hot, but I have yet to see any actual disadvantage from this. I generally use for this and many other purposes a spray of liquid albolene medicated with 1 to 2 per cent. menthol-camphor. The atomizer fits snugly but lightly into the catheter and can be used as soon as a blast of the bag has proved the catheter to be in correct position, giving for the first blast or two a fairly constant stream of air, then fine, oily spray, which grows coarse after a half dozen blasts; then by slight withdrawal it can be made to fill the lumen partly or wholly, as desired, with the liquid albolene, and another blast of the atomizer or Politzer bag will inject this up the Eustachian tube, perhaps into the tympanum. In this last we do not probably succeed as often as is claimed. Where more stimulation is desired, the vapor of iodin is readily sucked into the Politzer bag and blown into the tympanum, and in the inveterate cases, Richey's plan of injecting a weak silver solution so as to form silver iodid within the drum cavity may be cautiously tried. This is, however, potent for harm as well as good, and

needs great circumspection, but the results sometimes fully reward the severity of its action. The drumhead should always be studied after any of these procedures, and the effect noted. Pneumatic massage with the Siegle's speculum can profitably follow in almost all cases.

Finally, as to the value of such treatment, many a case of hypertrophic or sclerotic deafness, which has been growing steadily worse under Politzer inflations and good nasopharyngeal treatment, will hail with delight the immediately greater and more lasting gain from the catheter treatment. The duration of the benefit will grow longer with each repetition for four or five weeks—when it ceases to extend it is generally time to remit treatment, having the patient use, several times each day, gargling for its gymnastic effect, and pneumatic massage with the finger tip. After a few weeks, treatment by the catheter can be resumed with further gain for four or five more weeks. As a result the patient will probably have gained most of what is possible in the case and should have a short course semi-annually thereafter to prevent backsliding and to test the possibilities of further gain.

Fig. 3.—Atomizer used in catheter for inflation, tubal spraying and injection of fluid into the tympanic cavity.

The restoration of hearing may be very incomplete, our tests showing that it is but a small fraction of the normal and that the defect is still very great. Yet this pitiable remnant may be many times as much as the patient had before treatment and a source of great satisfaction and benefit to the sufferer and friends; while the negative gain is no small one that farther loss and its overwhelming disaster has been converted into moderate but most comfortable gain in hearing.

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AT THE recent meeting of the Illinois State Medical Society, a resolution was adopted by a unanimous vote warmly thanking Governor Tanner for the interest he has manifested during the past two years in the cause of legitimate medicine and the interest of the people, by aiding the passing of salutary, and preventing the enactment of improper, medical and sanitary laws. This society was organized in 1850 at Springfield, and next May will hold its fiftieth anniversary in the same city. Dr. Harold N. Moyer of Chicago will have the honor of presiding over the jubilee meeting.

## AMPUTATION OF THE BREAST.

### BY MEANS OF THE ANTERIOR AXILLARY INCISION.

BY EMANUEL J. SENN, M.D.

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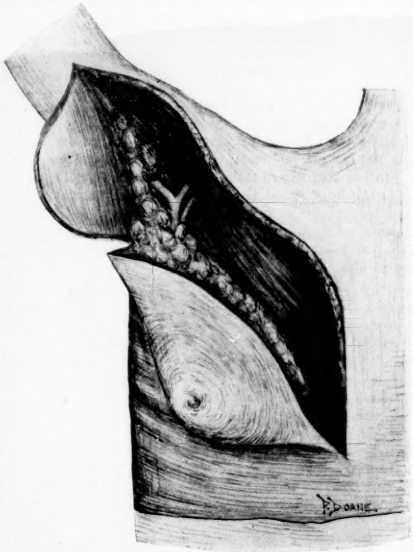
CHICAGO.

Amputation of the breast in malignant disease is no longer regarded as a palliative operation in prolonging life; but should have for its purpose a permanent result, as verified by recent statistics. The operative technic of Halsted, which is simply a practical application of the profound anatomic research of Haidenhain in this region is certainly to be recommended. Of late, I have removed the breast, together with the axillary contents, without making an incision in the axilla.

The object of this short article is not to describe the radical operation for removal of the breast, which is only too well treated in all works on operative surgery, but to dwell on the value of the anterior axillary incision as a preliminary. The accompanying illustrations are more explicit than a detailed description of the operation. The breast is circumscribed by two curvilinear incisions which meet above at the border of the pectoralis major muscle. The incision is then continued slightly internal to the outer border of this muscle, in an upward direction, to a point about one inch above the apex of the axilla, where it takes an outward course in the deltoid region, forming a gradual curve, which terminates at the level of the apex of the axilla. (Fig. 1.)

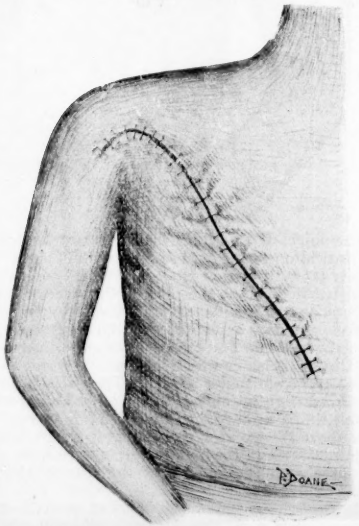
Figure 2 shows the breast removed from the thoracic wall, but suspended by the axillary glands and adipose tissue, which are about to be enucleated en

masse by blunt dissection. Figure 3 represents the operation completed.



I wish to lay stress on the following advantages of the anterior axillary incision:

1. It exposes to the operator a larger field for radical work than the ordinary axillary incision.



2. By making traction on the axillary flap, it is easily freed from the subcutaneous tissues with a few strokes of the knife, exposing at once the position of the axillary vein.

3. Injury to the vein is greatly diminished, because the incision bares all the surrounding muscular landmarks to this important structure. Moreover dissection is done away from the vein instead of toward the vein, as must be done through an incision in the axilla.

4. The axillary space is unfavorable to primary wound healing, being often the seat of a fistula long after the rest of the wound has healed intact. It is a region difficult to render aseptic; hence the advantage of access to this region from without.

5. The incision is so situated that it does not impede free motion of the arm, the patient being able to extend the arm to the head at the first dressing. There is no subsequent cicatricial contraction, as in an axillary scar, to interfere with the physiologic function of the arm.

6. The cicatrix is not dragged upon by motion of the arm, consequently scar tissue is little exposed to trauma through mechanic stretching; hence the diminished liability of recurrence of the disease.

## THE MEDICAL WITNESS.*

### HIS RIGHTS AND WRONGS IN COURTS OF JUSTICE.

BY JAMES B. BAIRD, M.D.

ATLANTA, GA.

Unquestionably the medical witness has some rights, and as surely does he suffer many wrongs. The rights, briefly stated, refer to the proper treatment of the physician on the witness stand; to a just recognition of the relationship existing, or which ought to exist, between the physician and his patient; and to a true valuation of his expert services. The wrongs, in a word, relate to a misconception of his rights, or to an utter disregard of them.

The treatment accorded the physician on the stand depends, in great measure upon the witness himself, and in part upon the court and the attorneys engaged in a given case. But few lawyers—none of the better class—will undertake to mistreat a medical witness who demeans himself with propriety, who actually possesses the information which he claims, or ought to have, and who gives his evidence or states his opinion in a simple, straightforward manner, without seeking to magnify himself, to dazzle his hearers by a display of profound erudition, or by the assumption of a degree of knowledge which he does not possess. But few judges will permit a competent and sincere witness to be badgered, bullied or ridiculed, even if such tactics should be attempted by a discourteous attorney.

If the principal object of all legal proceedings in court were simply to ascertain and to establish the truth, the task set before the expert witness would be greatly simplified. There would then be no incentive to confuse, to mislead or to combat the witness. But, unfortunately, such a purpose is not usually a predominant influence. Each side is intent on sustaining its own contention, and each seeks testimony tending to strengthen the position of the advocate. Hence, questions are adroitly framed, and answers are often ingeniously warped or distorted with the design of either impressing or suppressing certain salient points.

*Read before the Medical Association of Georgia, Macon, April 20, 1899

and the comfort of the witness is not considered of paramount importance in the management of the game.

Nevertheless, the mere treatment of the medical witness in the ordinary prosecution of a case in open court is chiefly of personal interest, that is, it relates to the individual rather than to the profession—for he may, if he can, use the legitimate, the recognized, and the generally successful means of self-defense against imposition. The most trustworthy weapons at his command are ability, evident honesty of purpose, quickness of perception, self-control, and that wonderfully serviceable quality which we call tact. He may greatly strengthen and effectually shield himself by declining all show of partisanship, by avoiding all manifestation of prejudice and by studiously abstaining from the use of strictly technic terms; by a candid, unbiased statement of facts, and by a clear, definite expression of well-founded opinion in plain, lucid language, but always refraining from obstinate adherence to mere dogmatic assertion, and from the attempt to explain what is not understood, to tell what is not known or to maintain an opinion which is not fixed and which is not firmly believed.

In theory, the relation between the physician and his patient is confidential. In theory, the knowledge and the skill of the physician constitute his capital. In practice and in common law, communications to the physician by his patient are not confidential, and the knowledge of the physician may be exacted of him at any personal cost or sacrifice, without fee or reward, by or through the arbitrary processes of the courts.

These are facts. Are they real evils? Are they genuine wrongs? If so, is there a remedy? Where can it be found, and how may it be applied?

In reference to the first proposition, which is the more important of the two, the "American and English Encyclopædia of Law" says, in substance: At common law, confidential communications made by a patient to a physician are not privileged, but by statutes in several States communications made by a patient to his physician or surgeon, and information acquired by him while attending a patient in a professional capacity, and which are important to enable him so to act, are protected. The States in which such statutes have been enacted are: Arkansas, California, Colorado, Dakota, Idaho, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nevada, New York, Ohio, Oregon, Utah, Washington, Wisconsin and Wyoming. In the States named the privilege extends to facts necessary to enable the physician to prescribe, and which are communicated to him for the purpose of enabling him to perform his professional duties. Such facts are privileged, whether learned directly from the patient himself or acquired by the physician through his own observation or examination; further, it does not extend. The privilege is not necessarily terminated by death. Whether the statutes protecting confidential communications between physician and patient extend to criminal cases is not well settled. The provision in the California code, for instance, is expressly limited to civil actions, while in New York the decisions seem to hold that the statute applies also to criminal cases.

Clergymen and priests, like physicians, are, at common law, unprotected in communications and confessions made to them. By statute in some of the States they are shielded to a limited degree in the exercise of their peculiar functions. Current public opinion, however, generally sustains the privilege voiced by these special statutes, even in States where they do not exist, and, from considerations of policy and expediency, the spiritual advisers of the people are seldom required to disclose confidences in courts of justice.

The object of statutes relating to privileged communications to physicians seems to be to place the communications made to physicians in the course of their professional employment on the same footing with communications made by clients to their attorneys in the course of their employment.

The character of the communication as to being important or material is of no consequence, and to entitle a client to this protection it is not essential that he should be apprised of the rule, or that he should enjoin secrecy. The privilege is that of the client, and not of the attorney.

At common law, as well as under statutes, the protection given privileged communications continues forever, unless waived by the client, and such waiver must be distinct and unconditional, and can not be extinguished by agreement or compromise. Communications to attorneys that do not come within the peculiar scope of the lawyer's duty and profession, or that have no elements of confidence in them, or that are made for any unlawful purpose, having for their object the commission of a crime, are not privileged.

The fact that twenty States of this Republic have by special statutory enactment sought to remedy an omission or defect in the common law, and to place thereby physicians in the same category with attorneys, is equivalent to an admission of an existing evil; it is a tacit acknowledgment of a positive wrong and a practical suggestion of an efficient remedy. The personal experience of some physicians and of some lawyers in this State conclusively confirms the reasonable inference drawn from the deliberate action of these twenty States, and liberally discounts a rule of action which ought to be changed, not alone in justice to the 2600 physicians of this State, but also and chiefly in the interest of that far larger body of citizens who occupy the dependent position of patients. Such statutes mean simple justice to the physician, but much more than mere justice to his patients. They are serviceable to the physician only in so far as they enable him to be faithful to his professional obligations and true to his trusts, and in such degree alone as they protect him from acting the part of an involuntary and reluctant detective, informer or spy, all of which is obnoxious to his instincts, abhorrent to his feelings and at variance with the cherished tenets and traditions of his honored profession.

But to the large number of persons—to the great bulk of the people—who are from force of circumstances compelled to confide in the discretion and honor as well as in the wisdom and skill of their medical adviser, such laws are of most profound import and of far-reaching consequence. In their behalf, then, being cognizant of the conditions, it behooves the medical men of the State, unselfish and patriotic, to move for a remedy.

From satisfactory evidence, I conclude that the trend of public opinion is decidedly in favor of protecting the professional secrets of physicians. Why not, therefore, crystallize this public sentiment in the form of a statute, and thereby give to the preference of the people the force and effect of written law?

The second proposition is one in which the medical

profession is more directly concerned than the general public, but it affects the interests of both. In the State of Georgia, the right to employ experts to elucidate questions before the court is fully recognized and freely accorded by express statute, which, in terms, declares that expert testimony on any question of science, skill, trade or like subject is admissible. An expert is defined as one who has made the subject on which he gives his opinion a matter of particular study, practice or observation. He must have a particular and special knowledge on the subject, and such opinions may be given also, on facts as proved by other witnesses. Ample provision is made for obtaining expert services through the machinery of the court, but no provision whatever is made for adequate compensation to those who, under a heavy penalty for failure, are required to lay aside all other business and to attend the sessions of the court until excused therefrom.

To secure the attendance of a witness in the county of his residence for the benefit of his opinion, in criminal prosecution, as in the case of a witness to the facts, it is only necessary for the clerk of a superior court to issue, on application, a subpena commanding him to appear at a stated time. No restriction is placed on either side in summoning witnesses within the county. For his detention he is allowed a *per diem* of 75 cents, but this munificent allowance must come out of a fund accumulated from fines and forfeitures, which is always exhausted by prior liens, so that even this show of generosity goes for naught.

In civil cases, a medical witness can not be carried out of his county against his will, and his testimony is obtained through the medium of interrogatories, and even in civil causes pending in the county of his residence obedience to summons is discretionary with the practicing physician, but he may be forced to answer interrogatories in any civil case, either within or without the county.

In criminal cases, his attendance may be required in any county within the State. But in this event, the subpena, issued as in the home county, by the clerk of the superior court, must be countersigned by the solicitor-general of the circuit. For attendance on court in another county, all witnesses for the State are alike allowed $2 a day and mileage not to exceed four cents a mile necessarily traveled in obeying the summons.

Witnesses on behalf of the defendant in criminal cases can only be compelled to attend court in another county when so directed by the presiding judge, who may, in his discretion, so order when, in his opinion, the ends of justice demand it, and under these circumstances, the defendant's witnesses are entitled to receive the same remuneration from the county as the State's witnesses. Otherwise, they are voluntary witnesses, and are not given a *per diem* or traveling expenses out of the public funds. They have, however, a lawful claim on the defendant for compensation not to exceed the amount allowed witnesses who are duly summoned. But the claim, in the great majority of cases, is worthless, as such defendants are usually insolvent. The duty of the citizen to aid in the administration of the government whenever his services are required is readily conceded, and the special consideration manifested toward the medical profession on the part of the State, by relieving its members from certain public functions, as ordinary jury duty, imperative obedience to summons in civil causes, etc., in deference to the physician's relations to society, is duly appreciated, but the obligation of citizenship should be equally distributed and should not be heavily imposed upon the few.

In the nature of the case, the services herein referred to must be rendered by a comparatively limited number, and the only way to equalize the burden is to return a just compensation, out of the common fund of the people, for the professional and scientific knowledge contributed by the few in behalf of the many.

If a party to a suit should avail himself of his lawful privilege, and employ, as is usually done in important cases, competent expert services, the fact that a fee is paid the expert is often used by opposing counsel to discredit the witness with the jury by making it appear that self-interest influences his evidence, and, either by assertion or by innuendo, suggesting that his opinion is controlled or directed by pecuniary consideration.

Several States have statutes providing a reasonable remuneration for expert services; among the number are Iowa, New York, North Carolina and Rhode Island, and, so far as I am informed, their operation is satisfactory. In one State at least, Indiana, it has been provided by statute that experts shall testify without extra compensation.

In a case before the United States Court in the District of Massachusetts, the court said: "When a person has knowledge of any fact pertinent to the issue to be tried, he may be compelled to attend as a witness. In this all stand upon an equal ground But to compel a person to attend merely because he is accomplished in a particular science, art, or profession, would subject the same individual to be called upon in every cause in which any question in his department of knowledge is to be solved. Thus, the most eminent physician might be compelled, merely for the ordinary witness fees, to attend from the remotest part of the district, and give his opinion in every trial in which a medical question should arise. This is so unreasonable that nothing but necessity can justify it."

Before the adoption of the prohibitory statute by Indiana, the supreme court of that State held that: "When a physician testifies as an expert, by giving his opinion, he is performing a strictly professional service. The purpose of his service is not to prove facts in the cause, but to aid the court or jury in arriving at a proper conclusion from facts otherwise proved." It also held that such witnesses were entitled to just compensation for the particular service.

The United States Court for the Western District of Arkansas ruled that when a witness has facts within his knowledge the public has a right to those facts, but the skill and professional experience of a man are his individual capital and property and he can not justly be compelled to bestow them upon any one as a gratuity; that neither the public nor a private person can rightly extort such services without proper remuneration.

Contrary opinions have been rendered in Alabama, in Texas, and perhaps in other States. In English courts it has been held that it is more correct to regard professional and scientific knowledge in the light of property which the public has no right to use without making proper compensation.

It seems to me that no argument beyond the bare statement of the facts is necessary to sustain the view that the medical profession and the people suffer in

consequence of our inadequate laws upon these points. If the laws of the State are truly inadequate or defective, such inefficiency and defect must constitute an evil; and if the citizen, in consequence of such imperfection, does suffer, there must be a wrong; so, if the evil and the wrong really exist, as is confidently believed, appropriate legislation judicially applied is the only and the proper remedy. Legislation which makes confidential communications to the physician privileged communications, and which provides, in the discretion of the court, just compensation for expert medical services, will correct the evil and right the wrong, and toward the procurement of such legislation in the interests of the medical profession and of the people of this commonwealth, the united efforts of this association should be diligently addressed.

## REPORT ON MASSAGE.

MASSAGE FOR MOVABLE KIDNEY—IN GOUT—IN FRIEDREICH'S DISEASE—IN LOCOMOTOR ATAXIA—FOR DISPLACED SEMILUNAR CARTILAGES—IN SKIN DISEASES AND ULCERS.

PAPER NO. III.

BY DOUGLAS GRAHAM, M.D.

BOSTON, MASS.

(*Continued from page 412.*)

### MASSAGE FOR MOVABLE KIDNEY.

Fellner speaks highly of the good effects of abdominal and pelvic massage for the cure of movable kidney. Of 98 cases of this affection he used this treatment in 40 severe ones, and found that the disagreeable feelings were removed and the kidney resumed its natural position in all but two patients. In 11 cases, 5 of which are minutely detailed, the good effects were observed a year or two after. Of the 98 cases, all were women. The affection occurred 67 times in the right side, 15 in the left, 19 double. Sixty-seven had given birth to children, and of these, 48 were multiparæ. In 53 cases there were also pelvic troubles. An acute injury seemed to be the starting-point in 5. There were digestive disturbances in 38, and disturbances of the intestinal functions in 59. In many there was frequent urgency to urinate; in two cases there was intermittent albuminuria, and in two hydronephrosis.

The author points out that it is not right to call every movement of the kidney, upon breathing, movable kidney, because every kidney has physiologic movements. Naturally, it is only when decidedly out of place and causing disturbance that attention should be directed to it, and from an examination of 2900 cases for movable kidney, he certainly has the right to speak authoritatively. With kidneys unduly movable, neurasthenic symptoms were often present—palpitation of the heart, anxiety, difficulty of breathing, feelings of oppression, nervous cough, *globus*, dizziness and fainting, and sometimes melancholia In all the cases treated by massage the patients were relieved of their discomforts during this treatment, and the objective results were also evident.[1]

### MASSAGE IN GOUT.

Our learned friends in France tell us that in chronic gout the good effects of massage are generally recognized, but opinions differ as to the best time to use it. M. Lecorché, M. Bouchard and M. Gendre recommend massage after the acute stage, in order to combat muscular atropy, to favor the absorption of infiltrations, to break up the tophaceous concretions, and to oppose fibrous ankylosis. During an acute attack it is well to abstain from using massage. M. Rosenblith, however, claims to have obtained good results from its use in seven cases of acute gout, but his opinion is not shared by his confrères.[2]

The London *Lancet* (Oct. 2, 1897) sounded a note of warning on this subject, in pointing out that the gouty kidney is seldom or never quite equal to its functions. Here it thinks an unqualified and over-enthusiastic masseur might do much harm as he goes ploughing away at muscles infiltrated with uric acid, creating as much waste as a brisk six-mile walk and more than the kidney can throw off. Kept up from day to day, for weeks, this practice may be destructive to an already damaged kidney, and the patient may find that though he has got rid of a certain amount of pain and acquired a comparative ease of movement, yet this may be at the expense of renal incompetence and eventual uremia. On the Continent this is said to be of frequent occurrence, where massage is practiced with more zeal than knowledge.

"We have allowed the quacks to get ahead of us in the application of electricity to therapeusis," said Dr. Anstie, a long time ago. The same must with equal truth be said of massage, says the editor of the *Lancet*.

In gout and many other affections where massage and electricity are to be used, it would seem better that they should be applied by a physician rather than by the gymnastic masseur.

### MASSAGE IN FRIEDREICH'S DISEASE.

Dr. Zabludowski of Berlin reports (*Therap. Monatsh.*, December, 1896) a case of Friedreich's disease (hereditary ataxia), interesting on account of the youthful age of the patient—a girl of 9 years—and also because of the successful treatment of the case by massage. The patient was seen by Professor Mendel in consultation with Dr. Zabludowski, and the great improvement which a four-weeks course of massage effected was witnessed by both. The child then seldom fell, and could walk without deviation, and she did not let things fall out of her hands as formerly. The choreiform movements were scarcely visible and sleep was quiet.

### MOVEMENTS IN LOCOMOTOR ATAXIA.

Dr. Frenkel of Heiden points out that the purpose and object of this treatment has been much misunderstood. In tabes the muscles are perfectly contractile, and neither atrophic nor shortened, therefore it is often worse than useless to order gymnastic exercises. The nutrition of the muscle is not at fault, and it is not muscular contractions which are so much wanted as co-ordination—orderly and combined movements.[1] The principle of the treatment in question is the exercise of the will in controlling and ordering the muscles to effect a given movement such as the seizing of a swinging ball. By the repetition of attempted efforts, the movements gain in precision and the ataxia is correspondingly overcome. The purposelessness of the gymnastic exercises as usually ordered is not only a mere contraindication by negation, but there is also involved a positive danger; for not infrequently the incitement to increased muscular exertion leads to exhaustion, and the danger of this is all the greater seeing that the patient is not possessed of the usual sense of fatigue which guides us in health. In all

[1] Wiener Med. Woch., No. x, 1896, p. 398.

[2] Révue d'Hygiene Thérap., 1896, p. 188.

[1] The muscles are often relaxed, elongated and thin; therefore judicious contractions are indicated.

forms of activity great supervision is needed. Riding and bicycling, even in the earliest stages, are to be forbidden, and even walking is to be well controlled. (*Therap. Monatsh.*, March, 1897.

### MASSAGE AND BANDAGING FOR DISPLACED SEMILUNAR CARTILAGES.

In an article of mine in the *Amer. Jour. of Med. Sciences*, November, 1896), on "Massage, Movements and Bandaging in the Treatment of Displaced Semilunar Cartilages of the Knee-joint," I arrived at the following conclusions:

1. That neither in their natural nor unnatural positions can semilunar cartilages often be distinguished from the surrounding tissues.

2. That the position of the leg affords the best means of inferring whether one or the other semilunar cartilage may have been displaced when it can not be felt; the leg being usually flexed and the foot turned out when the internal meniscus is dislocated, the leg flexed and the foot turned in when it is the external.

3. To attempt to reduce a dislocated semilunar cartilage it is wise to flex the leg, then extend it suddenly, rotating the leg inward if it be the internal cartilage, and outward if it be the external, while exerting pressure on the offending region.

4. That there is a natural tendency in some cases of dislocated semilunar cartilage to slip back into place when the leg is not artificially restrained.

5. That if the knee be immovably fixed in splints or plaster before the cartilage has gotten back into its natural situation, the joint is locked and restrained from gentle instinctive movements that might favor its return.

6. That cases of displaced cartilage are attended by voluntary and involuntary restraint of motion on account of pain and mechanic impediment, and in some cases by synovitis and the formation of adhesions. Forcible passive motion might then have the double purpose of breaking the adhesion and rectifying the displacement.

7. That after a meniscus has been restored to its natural situation, it is not so securely and comfortably held by plaster or splints as by a pad of a few folds of bandage and a figure-of-eight bandage applied over this, which affords support and comfort and a safe limit of motion.

8. That it is possible by carefully applied massage, resistive movements, home exercises and electricity so to strengthen the muscles on the front of the thigh, the fascia, ligaments and attachments of the knee-joints that they will safely hold the previously dislocated semilunar cartilage without artificial support.

9. These remarks do not apply to cases requiring surgical operation, though the above-mentioned combination of treatment might be safely tried in some cases before cutting into a knee-joint, but more especially after operation for restoring motion and strength to the knee.

### MASSAGE IN SKIN DISEASES AND ULCERS.

In the *Archives Médicales Belge* for July, 1898, we are told that Dr. Hatschek of Kaposi's Clinic at Vienna treats prurigo successfully by means of centripetal effleurage of the limbs, used for ten or fifteen minutes at a time. With the disappearance of this condition from the limbs, the cutaneous lesions of the body are also rapidly cured. In acne of the face, Dr. Pospelow of Moscow practices massage twice a day.

Various ulcers of the leg are also amenable to massage systematically used without any medication other than a moist boric dressing. Dr. Bekerievitch obtained cures in about four-fifths of 264 cases treated in this way. After each massage a roller bandage was applied. In such cases Dr. Edinger proceeds in the following manner: After a complete disinfection of the limb, effleurage with the tips of the fingers anointed with boric vaselin is practiced. (The use of the whole hand where possible would be more effectual and agreeable.) Then massage of the upper part of the limb above the ulcer is done, gradually approaching the edge of the ulcer. Centripetal effleurage is next used at the edges and below the ulcer. The force is proportioned to the induration of the edges of the ulcer. When the base of the ulcer is greenish, torpid and sanious, Erdinger uses massage over the ulcer itself. The surface is then covered with a piece of linen smeared with boric vaselin, and light massage is practiced over this dressing. Daily séances are given at first, the intervals being lengthened as the ulcers heal. This treatment allows patients to continue their calling and is said to effect cures in from two weeks to two months.

In 1891, Dr. A. E. Millard, surgeon to the Victoria Infirmary of Glasgow, published some interesting observations (*Glasgow Med. Jour.*) on the favorable results of massage in chronic ulcers of the leg. He told us that these are apt to arise from some slight accident to a limb in a condition to break down at the slightest provocation. The parts are in a state of passive stagnation or engorgement, the result of which is a hyperplasia of the connective tissue and thickening of the parts around, as shown by the denseness and hardness of the soft tissues. The blood stagnation renders the new-formed tissue, as well as the old, of low vital power, so that an ulcer once formed is likely to extend. The venous engorgement and new tissue cause much mechanic obstruction, preventing the entrance of fresh arterial blood to the parts and the exit of effete material by the lymphatics.

The indications are the relief of the engorged state of the veins and of the obstruction in the lymphatic vessels, the readmission of the arterial blood to the parts, and the removal of injurious influences from the surface of the ulcer. The recumbent position and the elastic bandage have proved to Dr. Millard far inferior to massage, which drives on the venous blood and lets in the arterial, forces out the contents of the lymphatics and allows the entrance of worn-out materials into them. Massage is not only applied to the limb, but also to the ulcer over a piece of cloth dipped in a solution of bichlorid, 1 to 2000.

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**Sanitary Report, Havana, Cuba.**—The report of the chief sanitary officer of Havana, Cuba, for the month of April, 1899, shows the total number of deaths to have been 617. The largest number from any one cause was 102 from tuberculosis, following which came enteritis 75, heart disease 54, malaria 52, compression of brain 37, arterial sclerosis 36, meningitis 24, typhoid fever 18, measles 3, smallpox 1, scarlet fever none, gunshot wounds 8. No statement of population or rates is made. Of infectious diseases reported to the chief sanitary officer during the month, there were yellow fever 3 cases, typhoid fever 24, infectious fever 23, pernicious fever 4, scarlet fever 5, measles 611, tuberculosis 183, diphtheria 55, smallpox 3 and varioloid 21. The premises were disinfected in 271 cases of disease; 622 cesspools were cleaned; sanitary advice was sent to 2198 property-owners, and 7044 reports of house-to-house inspections were received.

# DIPHTHERITIC CONJUNCTIVITIS.

## A CASE TREATED BY INJECTIONS OF ANTITOXIN; RECOVERY WITHOUT DANGER TO THE EYE.

BY CHARLES P. PINCKARD, A.B., M.D.
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CHICAGO.

On March 22, 1899, W. S., a farmer, 23 years of age, was repairing the floor of a barn when some of the dust flew into his left eye. The discomfort caused soon passed away, but on March 25 the eye became red and swollen. Classic symptoms of conjunctival inflammation rapidly developed and increased in severity, so that on March 28 he presented himself to Dr. W. E. Walsh of Morris, Ill. At that time the lids were much swollen, red and somewhat tender, with edema of the face extending to the angle of the lower jaw. The glands in the neck were somewhat enlarged. Pain was very slight. The palpebral conjunctiva showed a grayish membrane, adherent, on the removal of which the conjunctiva bled freely. There was considerable chemosis, but the cornea was clear; pulse 88, temperature 100.2 F.

Antitoxin, 2000 units, was injected into the back the following day, March 29. On March 30, A.M., the temperature was 99.4, pulse 90. The local symptoms seemed to improve during the day, but by the next morning they were much worse. Temperature was then 101.5, pulse 112.

I first saw the patient on the afternoon of March 31. The condition was as follows: The lids were enormously swollen, projecting far out from the face, the edema extending from above the brow over the side of the face into the left side of the neck. The glands in the neighborhood of the ear were very much swollen, as were those in the neck under the jaw. Both lids were of a dusky-red color, the skin being tense and very shiny. The redness was not sharply defined as in erysipelas, but faded gradually into the surrounding skin. At the inner canthus there were some slight excoriations. A dirty yellow serous discharge kept trickling from between the lids and ran down the cheek. On palpation the lids had the peculiar "board-like" or "brawny" feeling so characteristic of extravasation of fibrin into the tissues.

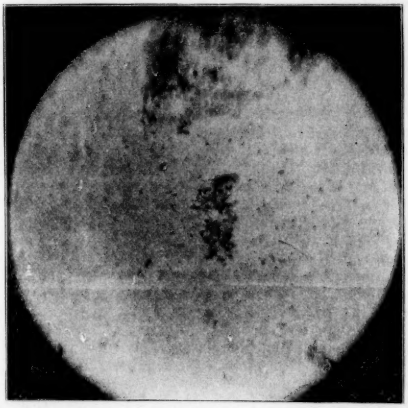
With considerable difficulty and with some pain, the lids were everted. The conjunctiva of the upper lid was dark red, much swollen and quite tense. Extending over the outer half of the tarsal surface was a dirty-gray membrane which could not be wiped off with a cotton swab, but was picked off with forceps in several places. Free hemorrhage followed. In places the lid tissue had been destroyed, and the gray membrane was adherent to the bottom of an ulcer. Above the tarsus near the fornix, was another patch of membrane much smaller, but equally adherent. On the lower lid the membrane covered nearly the whole tarsal surface, with the same characteristics as on the upper lid. The bulbar conjunctiva was so greatly swollen that the cornea could not be seen except by pushing aside the edematous tissue. When this was done the cornea was seen to be perfectly intact and transparent, without any signs of haze or ulcers.

An examination of the discharge was made by Dr. Frank Walls, and the characteristic Klebs-Loeffler bacillus found. The illustration is from a culture made the following day.

Realizing that what was to be done must be done quickly, 4000 units of antitoxin were injected into the patient's back at 4 P.M., March 31, and, on the morning of April 1, 2000 more. Reaction to the toxin locally did not begin until April 3, that is, two days later, but the swelling and the discharge continued about the same. It was noticed on April 3 that pieces of the membrane began to slough off, and the discharge to take on a very offensive odor. From this time on the symptoms slowly decreased, so that by April 12 the swelling had subsided and the discharge ceased, but there was still considerable redness. The constitutional symptoms disappeared within a few days after April 3.

During the whole course of the disease there were no complications in the nose and throat, nor were the constitutional symptoms very marked, the temperature never being above 101.5, the morning and evening being about the same.

The source of the infection in this case is obscure, but very interesting. There had been no diphtheria in the neighborhood for more than a year, as far as the people were concerned, but it seems that on the



floor the patient was repairing two hogs had suddenly died some months previously, and had lain there for some time. The chickens had access to this barn, and many of them died with enormously swollen throats. It was some of this refuse that struck the patient's eye.

Treatment was entirely confined to the injection of the antitoxin. Locally, no treatment, except cleansing of the lids, was given.

The great interest in the case is the action of the antitoxin. For forty-eight hours following the last injection no improvement in the local symptoms was noticed; in fact, the swelling of the face extended more into the neck, but the spread of the membrane ceased. After forty-eight hours the throwing off of the membrane was first noticed and the dissolution of the deposit in the lids and the subsidence of the swelling began at the same time and went slowly on. In throat cases in which the antitoxin is not injected until the sixth or seventh day, the resolution is very similar to that taking place in this eye.

An unusual feature of this case is that there was no

diphtheria in the nose or throat. Most cases of conjunctival diphtheria accompany diphtheria of the nose or throat.

While the bacteriologic examination is of the greatest importance, the diagnosis can not be made from the finding of the bacillus alone. The xerosis bacillus, which is probably present in many normal conjunctivæ, can not be distinguished from the Klebs-Loeffler bacillus by the microscope nor by staining methods. The only differential diagnosis between the two seems to be the physiologic test of the injection of a guinea-pig, the reaction being entirely different from the two bacilli In this particular case the finding of the bacillus with the typic clinic picture presented seems to leave no doubt of the diagnosis. Were there any doubt, the reaction to the antitoxin would dispel it.

While diphtheritic conjunctivitis seems to be rather common in Europe, it is an exceedingly rare disease in America. There have been a large number of cases reported in Germany and France as successfully treated by antoxin injections, but as far as the writer knows, this is the first successful case in this country.

## MEDICAL TREATMENT OF INTESTINAL OBSTRUCTION.*

BY C. D. SPIVAK, M.D.

Lecturer on the Diseases of the Gastro-Intestinal Tract, at the Medical Department of the University of Denver.

DENVER, COLO.

Under the term "Intestinal Obstruction," or ileus, passio iliaca, miserere, we understand a variety of pathologic conditions in which a more or less complete interruption of the passage of the intestinal contents is the most prominent symptom. Whatever may be the cause of the obstruction, mechanic or dynamic, or a combination of the two; strangulation, volvulus, intussusception, obstruction by tumors or foreign bodies within the bowel or external to it, fecal accumulation or paralysis of the bowel, the physician is confronted with a certain set of symptoms invariably present in and common to all of the mentioned etiologic factors, namely: Sudden onset, pain, constipation, vomiting, abdominal distension and diminished quantity of urine. The general diagnosis of intestinal obstruction is easily made, but the differential diagnosis is very difficult, and in some cases, strangulation, for instance, almost impossible during life.

When we bear in mind that the initial symptoms of appendicitis are almost identic with those of intestinal obstruction during the first three days, it is easy to understand in what a predicament a physician finds himself in facing such cases. The heaviest burden for a physician to carry is an undiagnosed case. Fortunately 80 per cent. of intestinal obstruction and 90 per cent. of appendicitis recover without operative interference, and one is justified in saying, concerning the treatment of intestinal obstruction, what Ewald said concerning appendicitis: that "it would smack of insanity to subject every case to the uncertainties of an operation."

In order to institute rational therapeutic measures we must first consider whence the danger threatens most. Aside from the profound nervous derangement and the direct compression of the bowel, the greatest danger lurks in that part of the bowel which lies above the constricted portion wherein the circulation is either interfered with or entirely cut off, causing paralysis or gangrene of the bowel or perforative peritonitis. But the constricted part, after all, would not be in such a "bad fix" if it were not for the extreme meteorism which fills up and immobilizes every part of the viscus. As long as this tension continues there can be no hope of freeing the constriction or obstruction.

The *rationale* of our treatment must therefore be: 1, to lessen the weight and downward pressure of the bowel above the constricted part, and, 2, to lessen the intra-abdominal tension; the former will prevent as much and as long as possible the interference with the circulation, and the latter will create favorable conditions under which the bowel can resume its mechanic functions. To effect the above conditions, the following measures should be adopted:

There should be absolute abstinence from food, for it is the height of idiocy and downright criminality to give any food whatsoever under the pretext of keeping up the patient's strength. Vomiting is nature's therapeutic agent, and whenever this agent fulfils its duty, no man dares interfere. Every bite of solid food, and every swallow of fluid drink is but an insult added to an injury. Thirst, which is one of the invariable accompanying symptoms, can be quenched by sucking small pellets of ice, the patient having been told to spit out the accumulated fluid. The thirst may also be lessened by wiping the patient's mouth with wet cloths dipped in ice-cold water.

Permit me at this juncture to make a diversion. This absolute abstinence from food is applicable not alone in obstruction of the bowels but in all acute diseases during the first few days. Most of the acute diseases are ushered in with gastro-intestinal disorders, and anorexia is always present. Where is the logic in stuffing the patient with "bland and easily digestible food" as our text-books say, at a time when the digestive, absorptive and mechanic functions are completely upset? I fully believe that all the acute diseases would run a more favorable course had the physicians adopted absolute "abstinence diet" during the first three and even five days. I have adopted this "blandest" of all diets in all my acute cases during the last three years, and have had no occasion to regret it; in fact, I can trace the good results in many cases directly to absolute abstinence.

When the vomiting sets in early and is excessive, physiologic salt solution may be introduced into the rectum. In case the duration of the disease is prolonged, nutrient enemata should be administered.

Not only must we keep "hands off" from interfering with nature, but it is our duty to help nature. In all cases of suspected obstruction of the bowel, the stomach should be washed out. By lavage we relieve the upper portion of the bowel from the pressure and weight exerted by the contents of the stomach. Moreover, having relieved the pressure, the bowel as a rule empties its contents into the stomach, and thus lessens still more the general tension, without which condition, as we said before, no relief is possible. Recoveries due solely to lavage have been reported, and it is admitted by all that it affords, in all cases, immediate and great relief from the annoying nausea, eructation, vomiting and distension.

High rectal injections should be given. The main object is to remove the contents of the bowel below the

* Read before the Denver and Arapahoe Medical Society, April 26, 1899.

seat of obstruction. Besides, the mechanic irritation of the water on the mucous membrane produces contraction of the bowel and thus a pull is effected by which the strangulation may be relieved. Cold water produces greater contractions and, therefore, it is to be preferred. Turpentin or salt may be added. Olive-oil has its advocates, who base their preference for it on the following grounds: 1, it does not irritate the bowel so much, and therefore it is retained longer; 2, it makes its way farther into the colon; 3, it softens the fecal matter and makes it more slippery.

Distension of the gut with air has the same effect as deep rectal injections—stimulation of the peristalsis of the lower bowel. It is contraindicated in volvulus, the beginning of gangrene and peritonitis.

Puncture of the distended gut is recommended for the relief of distension but has not been universally adopted. I have had no personal experience with this method.

Massage may be used in paralysis of the bowel resulting from chronic constipation, fecal or other occlusion. It is, however, a risky procedure and may do more harm than good. I have tried massage in several of my cases without effect. However, I do not claim to be an expert masseur.

Electricity, both the faradic and constant currents, is recommended. The favorable reports are confined to cases of paralysis of the bowel resulting from chronic constipation.

External applications to the abdomen in the form of poultices, turpentin stupes or ice-bags are beneficial and salutary. I have tried the ice-bag in several cases but had to give it up; it seemed to aggravate the pain.

Now comes the consideration of the most important question; what shall we give—a cathartic or an opiate? This has been a mooted point for many years, and the pro and cons waged relentless war, but of late all authorities, German, English and American, have made peace and decided in favor of opium. Theoretically they may be right, but when we are at the bedside we rely on our experience and common sense

One patient prays for a movement of the bowels; his or her friends look into the bed-pan with longing eyes, and we ourselves inquire first of all, "have the bowels moved?" He whose heart has not swelled with thankfulness at the sight of the first fecal matter in a case of obstruction of the bowel or appendicitis is devoid of any religious feelings. Who will then dare to give an opiate on theoretic grounds and thereby mask the symptoms and aggravate the "interruption of the passage of the intestinal contents?" In all cases where absolute constipation is the prominent symptom, I hold it to be imperative to bend all our energies to bring about a movement of the bowels, except when there is excessive vomiting or after the cathartic has been given a thorough trial.

I am sure there are thousands of physicians who believe as I do, who invariably give cathartics, as I always do, and who too count many recoveries. Why not come out openly and boldly and say so, the "authorities" notwithstanding?

Of all the cathartics, sulphate of magnesium in saturated solution, takes the lead: one, two, three, and four teaspoonfuls of the salt to the same amount of water given every half hour, hour or two hours, according to age and other conditions.

A preparation used by our grandfathers—infusum sennæ compositum, or black draught of the European pharmacopeia, and which, officially, is made up of senna 6, manna 12, magnesia sulphate 12, fennel 2 and water 100—has proved to be an improvement on the simple epsom salt. During the last three months I have attended three cases of obstruction of the bowels and in each case I used the infusum sennæ compositum, in which a double quantity of the salt was used. One patient had manifested such alarming symptoms that Dr. C. A. Powers and myself in council decided to operate within twelve hours. The diagnosis was wavering between appendicitis and strangulation. After the fourth tablespoonful of the infusion the bed-pan did not return empty. The second case, that of Dr. Muir, presented a train of symptoms which almost bordered on collapse. I diagnosed the case as obstruction of the bowel, due either to appendicular or some other origin. The diagnosis was not cleared up, but the bowels did after the third tablespoonful of the infusion. The third case, that of a young man, was a case of appendicitis, according to the letter and spirit of the latest text-book. Here too the infusion did not fail to bring to light what was hidden in the bowel.

In cases where the pain is not mitigated by lavage, enemas, hot applications, etc., I do not hesitate to give a hypodermic injection of codein. One-quarter or one-half a grain will not do. I give a whole grain. This opium-derivative does in no way interfere with my cathartic treatment.

I fully recognize the incompleteness of my paper. I wanted only to bring out most prominently the following points:

1. Every physician should consider his case of obstruction of the intestine, and for that matter, of appendicitis, to be one of the 90 per cent. that recover without surgical interference, and, therefore, not lose courage; be resourceful and hopeful.

2. Lavage should not be omitted in all cases of obstruction.

3. Cathartics should, in all cases of intestinal obstruction, be given a thorough trial, in the form of the infusum sennæ compositum.

4. The best diet in cases of intestinal obstruction is absolute abstinence from food and drink.

## A SPINDLE-CELLED SARCOMA OF THIGH.

A CLINICAL REPORT.

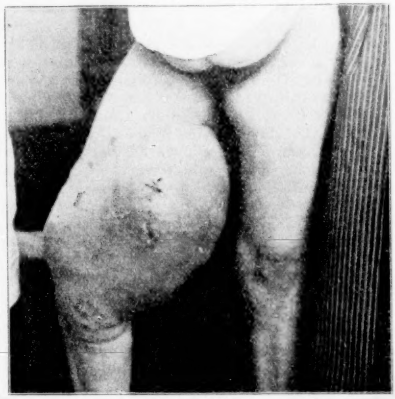
BY JACOB FRANK, M.D.

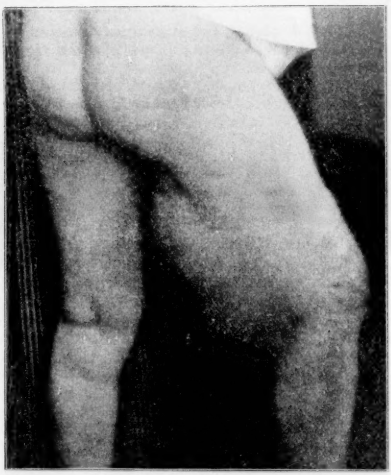
Surgeon to the St. Elizabeth and German Hospitals, Consulting Surgeon to Home for Aged Jews and Jewish Orphan Asylum.

CHICAGO.

Mrs. A. S., 38 years old, presented herself March, 1899, with a large tumor on the right thigh. Her mothers' family were healthy, also that of the father, with the exception of one brother dying at 40 with consumption, probably contracted by exposure during the Civil War. Menstruation began when she was 15 years of age and was regular up to within the last two months, when it stopped. She has been married twice, to her first husband when she was 16, and by him had two children, one still-born and one living six years, dying of "slow fever." At 19 she married her second husband, and has had one child, now 8 years old and healthy. Her first husband died of consumption. She has been in good health up to the present illness, which began about two years ago with slight tenderness about the right thigh. Two months later the patient noticed a little swelling, but being stout thought it was due to rheumatism. As she became emaciated the tumor showed itself. In December, 1897, she weighed

225 pounds, and she began to decline until now she weighs about 135 pounds. Her present condition is anemic and cachectic. The tumor covers one-half of the anterior portion of the thigh, the whole of the internal and posterior portions, and one-half of the external. The tumor is generally firm, and to the touch feels boggy in places. Although the mass is not movable, still the probability is that it has no attachment to the femur. On the left thigh at the base of Scarpa's triangle, there is another tumor about the size of two fists, movable and subcutaneous. No tissue was





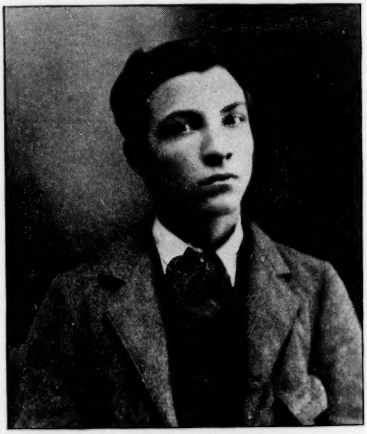
taken from this small tumor, for examination. The heart, lung and kidneys are negative. An exploratory incision was made into the large tumor to determine the growth, and on microscopic examination was found to be typically a large spindle-celled sarcoma. The smaller tumor on the left thigh shows that metastasis has probably taken place, and owing to the unfavorable prognosis, an operation was not undertaken.

17 Lincoln Ave.

## "DEAF MUTES," WITH CLINIC.*

BY MAURY M. STAPLER, M.D.
MACON, GA.

On July 28, 1898, Amie McB., a deaf and dumb young man, was brought to me for treatment by Mr. Robert Freeman, who claims to have known him all his life, and he gave me the following history: The young man was born at Columbus, Ga., eighteen years ago, the exact date is not known. His father died when he was very young and his mother married a second time, and moved to Macon when he was in his teens; he was employed as a soap wrapper, and when the family decided to move from here he was allowed to remain. His mother states that the fact of his being deaf was discovered when about 3 years of age; she says he has never had any very serious sickness, and has contracted none of the eruptive fevers from which deafness is so often traced; that she believes



he was born deaf, and she has had him treated many times, but with no evidence of good result. On careful examination I found him in good physical condition, defective only in that he could not hear, and his vocabulary consisted of three words, "Mamma, Amie and Robert," names easily spoken, and evidently caught from seeing the lips of others. His lungs were small, as is usual with the deaf and dumb, from lack of use. Inspection showed his external ears, including the external auditory canal, to be normal. The tympanic membranes were distended, opaque and of white smoke appearance. The throat, viewed through the mouth, was in good condition and the muscles of the pharynx were healthy and somewhat relaxed. The nose was almost closed on either side by enlarged turbinated bones, and the alæ of the nostrils were more cartilaginous than is usual.

Testing the ears by aerial conduction, he could hear very loud tones thrown from a near point directly into

*Read before the Medical Association of Georgia, Macon, April 19-21, 1899.

the left ear—he could hear no sound in the right ear. Conduction of sound through the bones of the head was acute, as shown by placing the handle of the tuning-fork on the forehead or behind either ear. This test indicated that the nerves were intact and the cause of deafness must be due to interference of the vibration of the tympanic membranes, disease of the mucus membrane lining of the middle ear, which might effect the malleus, incus and stapes, cause ankylosis or adhesion; or the cause may have been imperfect development, malformation, closure of the Eustachian tubes; possibly some one, two, or all of these things might be the cause, but I had seen worse-looking tympanic membranes carry sounds almost perfectly. Inflammation of the mucous membrane sufficient to have caused such deafness would have left some apparent sign, or there would be a history of pain in the ear. Malformation or failure of development would probably have been indicated by some sign, mental or physical. The brunt of suspicion had already fallen on the Eustachian tubes, because I had found them almost closed to the passage of air, when tested with Politzer's bag, and the tympanic membranes were to me indicative of closed tubes, and I make this distinction, that when the tympanic membrane is contracted the tubes are closed to the ingress of air, and when distended they are closed to its egress. The diagnosis assumed was that the primary cause was a congenital narrowing amounting to a closure of the pharyngeal opening of the Eustachian tubes for the exit of air especially. I gave the patient a placebo and told him to return in two days.

The routine treatment of removing the turbinated bones and adenoids, passing the Eustachian bougie, catheterizing the tubes and cutting the tympanic membranes as practiced by some, did not appeal to me, because the operation on the turbinated bones seemed too far removed to have the desired effect; adenoids need to be removed from the tubes themselves to be effectual, and the other methods are damaging and dangerous. Taken as a whole, such treatment for restoration of hearing has proven a failure from the time when the memory of man runneth not to the contrary, and has done more toward making these cases appear hopeless than any other one thing. For the past two years this immediate subject has held for me an all-absorbing fascination, and my mind was so insistent on some things not given in the books, that I selected three of them to test upon my patient when he returned. Instead of trying one at a time and testing the hearing after each, I alternated and did not test in thirty days; the consequence was, when I found hearing I attributed it to another cause, and was misled until later, when it was my good fortune to have another patient, a negro boy 12 years old, and to demonstrate, by being systematic, that hearing is restored by the method which I shall give you.

Shape an ordinary wire loop cautery point to conform to the outline of an Eustachian catheter, the shaft to be marked by spaces of an eighth of an inch; cocainize the lining membrane of the nose and pharynx well with a 4 per cent. solution, so that there will be no pain, and to contract the tissues so that the cautery may pass easily, then proceed in the same manner as in passing the catheter. Tilt up the nose with the thumb of the left hand, while the head is steadied by placing the other four fingers against the forehead. Take the posterior extremity of the cautery between the thumb and forefinger and middle finger of the right hand, insert the point and lower it to the floor of the nose, and then move it backward with the shaft in a horizontal position, the point of the cautery being kept in constant contact with the floor of the nasal cavity until it is felt to pass into the pharynx. When the posterior wall of the pharynx is felt, turn the point obliquely outward, but not quite horizontally, in which position it would be forced into Rosenmuller's cavity. While its posterior extremity is somewhat raised, the cautery is retracted with moderate rapidity, during which movement the point will be felt to slip over the bulging lip of the tube projecting from the lateral wall of the pharynx. After the point of the cautery has thus passed the posterior lip it has arrived at the pharyngeal orifice of the tube. When it has arrived here in this manner, take note of the posterior end of the shaft and retract an eighth of an inch by measure and cauterize lightly. This procedure places the cautery directly upon fibers of the tensor palati muscle which presides over the opening of the tube. The operation is sufficiently near the marginal opening to exert traction through connective tissue formation on the anterior margin of the tube and on the mucous lining, which lies in folds near the opening, acting somewhat as a valve. The operation also shortens some of the fibers of the tensor palati and makes a new fixed base from which they may act. It brings nature to the rescue with all her reconstructive agencies bearing on the weak point. With reference to performing the technic of the operation, it takes an adept to know when he has the proper position for applying the cautery in case of children, because the cartilaginous opening of the tube is not yet established, the pharyngeal walls are smooth, and there are no positive guides to the openings, but they are larger in the child, and if familiar with the method, the educated touch may enable you to discover them. I do not believe that every deaf and dumb one will be made to hear. I do believe there are many shut out as by a hair's breadth and can be restored. The patient's hearing has not improved much in the last three months. What he has enables him to hear a watch tick at from four to six inches. He can use the telephone and can hear ordinary conversation. He can count up into the hundreds, knows figures and denominations of money, his taste is esthetic, he likes a joke and is fond of the society of ladies. (See JOURNAL, January 14, p. 89.)

## MOUTH-BREATHING.*

BY JAMES M. CRAWFORD, M.D.
ATLANTA, GA.

My paper has reference to those cases where mouth-breathing is the rule and not the exception. If one will take the pains to minutely examine the interior of the nose and its function, he will not be surprised to learn that there is a penalty for those who persistently use the mouth as a breathing apparatus. The object of nasal breathing is twofold, to moisten and to warm the air before its reception into the bronchial tubes. We need not be surprised, then, if many cases of bronchitis are caused by mouth-breathing, the cold and dry air coming in contact with the bronchial tubes and air-cells, causing congestion, and later inflammation. The same condition often causes asthma. We no longer attribute mouth-breathing to habit, and

*Read before the Medical Association of Georgia, Macon, April 19-21, 1899.

scold the patient for not breathing through the nose, but on the contrary, we know that in these cases there is an obstruction in the nares, postnasal or pharyngeal spaces that forces one to breathe through the mouth instead of through the proper channel—the nose.

The most usual causes of nasal obstruction are the various forms of spurs and deflections of the septa, and now and then cases of nasal polypi, and hypertrophies of the turbinates. Usually, accompanying these conditions, we have adenoids in the postnasal space and frequently hypertrophied tonsils; indeed, so universally is this the case that I consider the examination incomplete where one does not examine very closely for the other conditions just mentioned, having already found that one exists. These various obstructions are generally met with in childhood or young manhood or womanhood, from the fact that the nasal, as well as the pharyngeal spaces, are much smaller at this age, and as they grow older these spaces are made larger, tending thereby toward relieving the patients, at any rate making them more comfortable. The frequency of these cases, especially of adenoids, met with here in the South shows that they are as numerous as in the North or West, and that a cold climate is not needful for their development. I am satisfied that adenoids are often hereditary, and am therefore very careful with my examinations of a family when I have found one of them suffering from this trouble. We often see children of an entire household similarly affected. No race seems to be exempt. I have seen and operated upon both white and colored; indeed, some of the worst cases of adenoids I have ever met with were in the colored race. The reason we see so few in the colored race is because of their financial inability to have such work done, and therefore they do not come to us.

The diagnosis in these cases is very easily made, as the pharyngeal tonsil can readily be examined. By placing a little mop of cotton dipped in a 6 per cent. solution of cocain muriate in the nasal spaces, we are enabled to discover the hypertrophied turbinates, as this application has the happy power of relieving engorged tissue, thereby making the diagnosis sure. I find cocain to be of great aid in the diagnosis of such cases, and I never fail to use it. The use of cocain, however, should be limited to making such examinations, and in cases where some form of operation is to be made. It should not be used habitually in the treatment of catarrhal conditions. The rhinoscope is of comparatively no use in diagnosing a case of adenoids, since but few patients can be trained to allow a mirror to be used in the mouth so as to make it possible to see anything in the postnasal spaces. Educate the sense of touch so as to be able to detect a case of adenoids by the use of the finger, which can readily be done. Not only can the adenoids be detected, but by this means you are enabled to say to what mode of operation you will resort. If soft and easily broken down, I prefer the use of my fingernail; if more fibrous, I prefer the Gleitsmann forceps. The causes of these various obstructions are but little known. To say they are hereditary traits is not making it plainer to the inquiring mind. There is no class of patients for whom the doctor can do more than for these.

To relieve one of these obstructions is to place new life in the patient, to make him happier, to make him less liable to the various forms of ear trouble that sooner or later most usually develop, and to make less liable the bronchial affections, asthma, etc. The successful restoration of nasal breathing, then, depends upon the removal of these obstructions. Spurs and deflections of the septum can be removed best by the saw. I prefer a thin-bladed and therefore a fine-toothed saw to cut when pushing from, and the other when pulling toward the operator—the former to be used when the obstruction is situated on the middle or near the front portion of the septum, the latter when the obstruction is at the rear end of the septum. No anesthetic is needful other than the use locally of a 10 per cent. solution of cocain muriate. The same method of local anesthesia is sufficient in reducing hypertrophies of the turbinates, with either the cautery or chromic acid. The idea should be not to burn the whole surface of the turbinate, but simply to burn the most projecting portion quite deeply, and in this way to cause a contraction of the tissue—buttoning the turbinate down as it were.

I have tried removing the adenoids in many ways, but have found none to equal that with the Gleitsmann forceps when the adenoids are fibrous, and with the finger when of the soft variety. I prefer to do this without an anesthetic, since statistics show the death of so many when made under the influence of chloroform and ether. The operation is not a painful one and is quickly made. It is not needful to put the patient to bed either before the operation or after, as very little reaction follows. I have never seen much hemorrhage follow the operation. I have made many operations on children as young as 4 years without any resistance whatever and without even the patient crying. I admit, however, that the temperament of the patient has much to do with it, some bearing pain much better than others. The operation sometimes has to be repeated.

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## CARDIAC DISEASE IN PREGNANCY AND LABOR.

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The clinic aspect of the different forms of cardiac disease during pregnancy is largely modified by the physiologic status at this time. The character of the blood, the development of the heart muscle, the changes in the circulation, the displacement of the viscera by the gravid uterus, have all a more or less direct bearing on the abnormal conditions due to cardiac disturbance.

As to the condition of the blood, we may consider in this connection the general increase in the quantity of the blood, this increase, contrary to the earlier observations on this point, being due, according to Fehling and Meyer, to an augmentation in the various constituents—namely, the red and white corpuscles, as well as the serum. This fact has a special bearing on the increased function imposed on the circulatory system, and the occurrence of stasis in pregnancy. The tendency of the fibrin of the blood to increase toward the latter end of pregnancy is also to be noted.

As to the heart, the existence of a physiologic hypertrophy is generally accepted. Vaquez and Millet, however, consider the modification in the volume of the heart during pregnancy as a transitory dilatation of moderate degree. Vinay also, in placing the

average increased weight of the heart at 250 grams, as compared with the normal weight (230 grams), considers this a natural variation. Where hypertrophy exists he looks upon it as a pathologic condition, due to the want of reserve force in the heart, sufficient to overcome the increased resistance in the circulation.

The changes in the circulation are represented by a general increase in resistance. This is due: 1, to the increased volume of the blood; 2, to the intercalation of the placental circulation; 3, to the lessened capacity of the thorax; 4, to the increase in abdominal pressure. The oxygenation of the blood is also interfered with at the time of greatest uterine distention, owing to the limitation in the excursion of the diaphragm. In connection with the increase in intra-abdominal pressure there exists, toward the end of pregnancy, an impairment in respiratory efficiency of the abdominal muscles, due to the pressure of the gravid uterus in its tendency to anterior displacement.

The conditions in pregnancy make it clear that the various organic functions have reached the border line of physiologic activity. Diseased conditions, therefore, of any organ, or any set of organs, in the non-pregnant state, exacting a functional resistance to the depressing effect of such condition, can be met successfully, while in pregnancy the limit of physiologic accommodation has been reached.

Affections of the heart as complications in pregnancy and labor divide themselves under the heading of inflammations as they attack the pericardium or endocardium, and as degenerative changes affecting the musculature. These affections may be acute, subacute and chronic in form.

The question of heart disease in pregnancy has to do not so much with the predisposition offered at this period to the occurrence of heart lesions, as with the influence of gestation on the development of these lesions, on the one hand, and with their effects on the course of pregnancy and parturition, on the other. The conditions of increased strain imposed on the heart in pregnancy may, however, give rise for the first to the evidences of a pre-existing trouble, by producing symptoms of functional disturbance.

### PERICARDITIS.

Pericarditis as a primary affection is equally as rare in pregnancy as in the non-pregnant state, although it is not incompatible with the existence of gestation. Conditions intercurrent in pregnancy, such as an attack of rheumatism, or the extension of pleurisy, also mycotic infection of the pericardium, may be responsible for the development of pericarditis. Pregnancy, however, does not offer a predisposition through any liability to these affections.

Acute pericarditis presents a more or less serious complication in the course of pregnancy, either from the systemic effect of the disease to which the pericarditis may be due—rheumatism, pyemia, tuberculosis—or from the mechanic effect of fluid within the pericardium.

A pre-existing chronic pericarditis is of importance from the embarrassment of the heart's action by reason of the adherent pericardium, as well as by the weakening of the heart muscle from the chronic interstitial myocarditis, secondary to the pericardial inflammation.

The following case is an example of chronic pericarditis, with fatal termination: The patient, pregnant for the third time, began her labor under apparently normal conditions. The first stage was without event, the pains recurring at frequent intervals. The duration of this stage was eight hours. During the second stage the pains recurred every three minutes, with unusually strong expulsive effort. Vomiting was present, but with no symptoms of exhaustion. In more than an hour from the beginning of the second stage, the head having engaged with difficulty, the patient suddenly developed signs of syncope; the skin became moist and the pulse rapidly imperceptible. Slight twitching of the mouth was present, also failure of respiration. The heart sounds became rapidly inaudible, and the patient died, undelivered, within a few minutes of the appearance of the fatal symptoms. On opening the thoracic cavity the right pleural sac showed general adhesions firmly organized, the thickened membrane being continuous anteriorly with the thickened pericardium. The lung showed no special changes beyond those connected with the pleural thickening. The heart was bound down by the densely attached pericardium, the latter being generally and markedly adherent. Both ventricles were contracted and contained dark fluid blood. The left ventricle was hypertrophied, the wall being from three-quarters of an inch to one inch in thickness. The right ventricle was extremely thin-walled, so that the effort to detach it from the pericardium caused a rupture of the wall. The aorta was mildly atheromatous.

As to the occurrence and cause of death, it is plain that the patient died from a suddenly-developing paralysis of the heart, from overstrain, the heart having been weakened by the secondary myocardial change, and restricted and hampered in its action by the pericardial adhesion.

*Treatment.*—The general treatment of acute pericarditis comprises rest, ice applications over the precordia, and measures to combat the primary condition underlying the pericarditis. It is doubtful whether such drugs as are given to reduce the heart's action are advisable. Digitalis is especially contraindicated, as the heart, hampered in its action by the pericarditis, has already reached the limit of its energy in overcoming the increased resistance to the circulation in gestation. Paracentesis, either for the relief of pressure from effusion, or for drainage in purulent pericarditis, is to be practiced without considering the condition of pregnancy, as the indications on the part of the heart outweigh the danger, from operation, to the continuance of pregnancy.

The obstetric treatment should be directed to the postponement of labor as long as possible, avoiding thereby the inevitable overstrain of the heart through the effort of labor. Where labor occurs, speedy delivery should be accomplished, by artificial means if necessary. Ether narcosis may be employed.

In chronic adhesive pericarditis the relief of strain, both during pregnancy and in parturition, is indicated.

### FUNCTIONAL DERANGEMENT OF THE HEART'S ACTION.

This, when due to faulty innervation, is shown by palpitation and precordial distress. Such a condition may appear conjointly with other manifestations of nervous origin in the beginning of pregnancy. It is important, however, to separate these symptoms from the evidences of a cardiac lesion otherwise undeclared. In addition to the physical signs the history of a given case will establish the diagnosis.

*Treatment.* — Antispasmodic treatment, together with the necessary attention to the general condition of the patient, is indicated. Tonics, diversion, regular walks in the fresh air, massage and, where nausea exists, a diet arranged so that the gravida is never without food for a longer period than two hours—will carry her comfortably over the period of nervous disturbance.

ACUTE ENDOCARDITIS.

Acute endocarditis occurs in either the simple or ulcerative form. Ollivier speaks of an "endocarditis of pregnancy," observed in one instance toward the end of pregnancy and disappearing in the course of the puerperium. Notwithstanding this, it is difficult to admit the occurrence of an acute non-infectious form of endocarditis in pregnancy unassociated with rheumatism or some antecedent condition. Acute endocarditis usually depends on some condition eitner pre-existent to pregnancy or developed in its course —such condition is represented, in acute form, by articular rheumatism, scarlatina, pneumonia and chorea—in chronic form, by underlying conditions of ill-health, such as phthisis, syphilis and chronic nephritis. The ultimate development of endocarditis in the form of embolism, from the dislodgment of a vegetation, is usually the result of an acute inflammation occurring on old, sclerotic valves. Such a complication is a serious event. Cerebral embolism is obviously more likely to occur during the strain of parturition than in pregnancy. Its occurrence is recognized by the shock incident to the local obstruction in the circulation, and by the later symptoms of hemiplegia.

Ulcerative endocarditis may occur secondary to septic infection or as a complication in the course of pneumonia. In either case its malignant course soon leads to a fatal termination, irrespective of pregnancy. The tendency to abortion and miscarriage as a result of these acute inflammations of the endocardium is inconsiderable.

*Treatment.*—There is no form of treatment in acute endocarditis especially suggested by the conditions in pregnancy, other than complete rest. This is especially indicated in order to lessen the increase in resistance of the intra-abdominal circulation, and in later pregnancy, to lessen the thoracic embarrassment.

Ulcerative endocarditis requires a form of treatment adapted to the associated disease, or, in the more malignant cases, treatment should be directed toward the relief of the septic manifestations.

CHRONIC ENDOCARDITIS.

Chronic endocarditis is met with during gestation as a continuance of pre-existing inflammation. Considering the fact that the child-bearing period corresponds to early adult life, we may exclude the form of endocarditis dependent on atheromatous degeneration. The forms of most frequent occurrence are: 1, that of a chronic valvular lesion, consequent to an earlier acute inflammation of rheumatic origin; 2, that associated with chronic nephritis. Vinay mentions a form of chronic endocarditis described by Durosier, in which a simple stenosis develops at puberty, or perhaps in infancy, without accompanying febrile disturbance. The condition remains without manifesting itself until gestation occurs, when it becomes apparent—but without interfering with the course of pregnancy.

Chronic endocarditis, however, considered irrespective of the myocardial changes resulting in failure of compensation, and unaccompanied by the arteriosclerosis of chronic nephritis, is scarcely to be set down as a clinic entity in pregnancy. Should the physical signs be overlooked, and the primary affection accompanying the endocarditis not assert itself—if such affection exist—the condition is not detected. The palpitation, the slight disturbance in respiration from precordial discomfort and the irregularity in the heart's action may be attributed, in early pregnancy, to the ordinary nervous disturbances of this period, or later, to the effects of pressure.

The order of sequence of valvular lesions, the result of chronic endocarditis, according to Porak, based on fifty-seven cases of mitral disease, is as follows: The occurrence of mitral insufficiency in 22 instances; the occurrence of mitral stenosis in 13 instances; the occurrence of mitral stenosis and insufficiency in 22 instances. Based on 13 instances of aortic disease, the order is as follows: The occurrence of aortic insufficiency in 9 instances; the occurrence of aortic stenosis in 2 instances; the occurrence of aortic stenosis and insufficiency in 2 instances.

Winckel places insufficiency of the tricuspid valve next in sequence to mitral disease, and groups with this aortic stenosis and insufficiency. The common association of the first-mentioned lesion with mitral disease scarcely entitles it to so important a place.

CARDIAC HYPERTROPHY.

The conditions in pregnancy favoring the so-called physiologic hypertrophy of the left ventricle play an important rôle in increasing the heart-strain, which, in valvular disease, is responsible for the pathologic increase in the musculature. This condition of hypertrophy is detected by the usual signs: by palpitation, the slow heaving impulse and downward dislocation of the apex-beat; by percussion, the increased dulness; by auscultation, prolongation of the first sound and loudness of the sound. Cardiac hypertrophy is usually progressive in pregnancy, and is apt to be associated with albuminuria. The form of hypertrophy accompanying arteriosclerosis in interstitial nephritis, although of less common occurrence than simple hypertrophy due to valvular lesion, is likely to seriously influence the condition of pregnancy. The following case is an example of associated heart and kidney disease:

A young married woman, the subject of chronic interstitial nephritis, aborted in her eleventh week, and in five weeks after curettage following this developed a hemiplegia of embolic origin. One year after this attack the patient became pregnant for the second time. During the seventh month of this latter pregnancy signs of failing compensation occurred, pulmonary obstruction and anasarca developing rapidly. Labor was induced with favorable results as to the relief of stasis and the disappearance of the edema. The patient, however, died in the tenth week after an intercurrent pneumonia.

It has been observed that the death of the fetus *in utero* contributes to the amelioration of the cardiac symptoms in hypertrophy. Merklen, for instance, mentions a case in which the dyspnea and pulmonary congestion disappeared preceding delivery and coincidently with the death of the fetus.

CARDIAC DILATATION.

With increasing resistance and the failure of the heart muscle to maintain its integrity we have the appearance of dilatation. Inasmuch as mitral insuffi-

ciency is the most common form of valvular disease occurring in pregnancy, dilatation of the left ventricle is the most commonly observed. Mitral stenosis, observed next in frequency, is responsible for dilatation of the right chamber. Aortic disease affects the left heart. The classic signs of dilatation—a diffuse impulse, with a quick, weak apex-beat (together with the transference of the impulse toward the right, in right-sided dilatation), the irregular and intermittent heart's action, and a weak, rapid pulse—are all present.

The symptoms of insufficiency are apt to appear in the third or fourth month, and are likely to continue in progressive form in spite of the effort to modify them by rest and treatment. These threatening symptoms are of graver import in women whose pregnancy has been preceded by beginning failure of compensation.

Broken compensation is manifested by difficulty in breathing on exertion. This symptom is present to an unusual degree, owing to the limited thoracic capacity and the pressure of the gravid uterus on the abdominal viscera and the venous trunks. There are present also digestive disturbances, a tendency to bronchitis and edema. There is often a tendency to the persistence of menstruation.

As to the effect of cardiac disease on the course of pregnancy and labor, and its influence in the puerperium, we may refer first to the condition in pregnancy. The tendency toward the interruption of pregnancy is frequent in the latter months, and not the exception in the early months of gestation. All depends on the progress of the disease either preceding conception or coincidently with pregnancy. We may divide the course of cardiac disease in this connection into two periods—that of complete compensation, and that of failing compensation. In the first period pregnancy may advance normally until a point is reached where the increasing arterial resistance and intra-abdominal pressure impose an undue burden on the heart. The effect of this can not be designated as a fault in compensation, and yet such effect is productive of the placental stasis on which the death of the fetus depends. In the second period the cardiac embarrassment is directly responsible for the death of the fetus through the imperfect oxygenation of the blood.

Repeated pregnancies are likely to establish a tendency to abortion. It is, however, not to be inferred that it is common for gravidæ affected with cardiac disease to abort; the conditions incident to an acute or chronic endocarditis, without valvular deformity and without the presence of associated disease, are not unfavorable to the continuance of pregnancy. Even in the more developed cases we may not look for a termination of pregnancy if compensation has been maintained.

Certain complications occurring in connection with valvular disease of the heart render the outlook grave. The febrile disturbance in pneumonia and bronchopneumonia, albuminuria with eclamptic seizures, hydramnion and twin pregnancy are instances of such complications. That form of malignant endocarditis, associated in rare instances with erysipelas, attacking the pregnant woman presents a grave prognosis. The occurrence of a recent endocarditis engrafted on an endocardium already diseased is often the starting point for a malignant endocarditis—the so-called infectious endocarditis of pregnancy.

The combined statistics of Courrijol and Porak show that in 220 collected cases delivery before term occurred in 92 instances. This is equivalent to about 40 per cent. Much depends, however, on the number of pregnancies through which the patient may have advanced, as the tendency to abortion is more marked in pluriparous than in primiparous women.

In considering the cause of such accidents, we may note that the blood-supply to the fetus is vitiated: 1, by the degeneration of the placenta, the result of minute hemorrhages into its tissue, and 2, by the imperfect supply of oxygen, as noted above. In addition to this the dislodgment of the ovum in earlier pregnancy is brought about, irrespective of the imperfect blood-supply from a nutritional standpoint, by uterine contraction, the result of the venous character of the blood.

The dangers of abortion and miscarriage may be considered as equal; in the former, the liability to hemorrhage, and in the latter, syncope secondary to the effect of labor are to be feared.

In reference to the influence exerted by the diseased heart on the course of labor and the puerperium, it is often observed that the second stage of labor is of short duration, whether this be from the stimulation of the uterine muscle by reason of the venous character of the blood, or from the fact that the more advanced conditions in heart disease are observed in pluriparous women, whose labors are apt to be short, is uncertain. In the third stage the possibility of hemorrhage from stasis is to be looked for. On the other hand, in the more promising cases, after the expulsion of the fetus the cardiac strain ceases and the returning equilibrium of the circulation is favored by the removal of the intra-abdominal pressure. Unfortunately, however, the clinic picture may be different—the evidences of increasing dyspnea and syncope make their appearance, to be followed more or less abruptly by death. Vinay contends that relief of heart-strain does not follow labor, as the continuance of the excessive blood-pressure is maintained physiologically in the first hours of the puerperium. As an illustration of the excessive tension in the aortic system he cites instances of cerebral hemorrhage following delivery.

Involution following labor is usually prompt; where hemorrhage occurs, however, it is apt to appear immediately after delivery, and is often so excessive as to place the woman's life in peril. In other instances it may be tardy in its appearance, coming on in the course of the first few days of the puerperium. In such cases it usually persists in spite of treatment.

According to Leyden, 40 per cent. of parturient women suffering from advanced cardiac disease succumb from the complication of labor.

Degenerative changes in the myocardium incidental to the endo- and pericardial inflammations need not be considered separately. Acute fatty degeneration due to imperfect nutrition of the heart muscle is usually dependent either on a prolonged infection accompanied by fever, or on the cachectic state occurring as a result of faulty blood organization, as in the anemia of pregnancy. Such changes in the myocardium are usually progressive only in the sense of their connection with hypertrophy and dilatation.

*Treatment.*—Prophylaxis. In chronic disease where compensation is present there exists no indication against marriage. Such cases are progressive in their downward course, not so much from the complication arising from gestation as from the effect of repeated

pregnancies. The conditions in advanced cardiac disease would likely prohibit the idea of marriage in the mind of the patient herself.

Considering heart disease in its early development, as it occurs in pregnancy, the first axiom of treatment is the avoidance of drugs where the heart's action remains regular. In the later stages cardiac stimulants, to equalize the circulation and overcome pulmonary stasis, are necessary. The use of digitalis, or strophanthus and nitroglycerin, together with laxatives and the employment of strychnin, is essential in this connection. The administration of potassium iodid or veratrum viride, in simple hypertrophy with overaction, may be indicated. Careful observation of the urine is essential, especially considering the frequent association of arteriosclerosis and nephritis with cardiac disease.

Much can be accomplished by diet and rest. Milk, taken both with meals and between them—substituted in fact for nitrogenous food, which under all circumstances is limited after the middle of pregnancy, is of great benefit. Jaccoud recommends one to one liter and a half, to be taken during the day in the first six months, and two liters during the last three. The albuminuria which is apt to be present in these conditions is a further indication for the use of milk.

The patient should lie down during an hour of each day, in cases where the cardiac disturbance is slight; in advanced cases confinement to bed, for at least the earlier half of the day, is of itself of great therapeutic effect. Cardiac exercise after the method suggested by the Nauheim regimen is obviously contraindicated, although in milder cases a certain amount of regular exercise, in the form of walking and without leaving the level, is indicated as a general hygienic measure.

Lactation is not to be advised, on account of the physical strain as well as its depleting effect in the demand on the watery constituent of the blood.

In the stage of asystole the energetic use of heart stimulants, together with venesection, is indicated—although interference from an obstetric point of view in these cases often becomes imperative. Such interference is also indicated in those cases where the circulatory disturbance is not great enough to point to a fatal outcome, and yet where serious aggravation of the heart symptoms may arise from the presence of uncontrollable vomiting. The loss of strength, the imperfect nutrition, and the depressing effect on the patient's nervous system may, in combination with the cardiac distress, render her condition critic.

As to the obstetric treatment, abortion is to be decried, and the induction of labor should be reserved for those cases in which further progress in the patient's condition means her destruction. It must always be borne in mind, however, that although delivery in these cases may benefit the fetus when it is viable, it does not always relieve the patient. In addition to this, labor when it occurs naturally, even in advanced cases, is usually rapid and free from great pain and stress. In difficult cases the use of forceps when the proper conditions are present, or resort to other procedures fitting the special conditions, is indicated. Hasty extraction of the fetus too abruptly decreases the abdominal pressure and disposes to hemorrhage.

In summing up the matter there are a certain number of cases in which the incessant dyspnea, the loss of sleep, and malnutrition from disturbance of the digestive system, although not of fatal import in themselves, call for extreme means of relief. The presence of nephritis also, when pointing to an unfavorable termination, may call for the induction of labor.

When sudden death threatens the patient before delivery can be accomplished, the child being viable, celiohysterotomy is to be performed. Vinay mentions fifteen patients who succumbed in such a crisis, and in this number seven were delivered *in extremis*. In three instances the child survived.

Two points in reference to treatment need to be discussed: One is the form of anesthetic to be administered in cases where operative interference is indicated; the other is the use of ergot. As to the first point, the contention that ether predisposes to pulmonary edema is offset by the fact of its less depressing effect on the heart than that of chloroform. The employment of ether, notwithstanding its risk—especially its predisposing action in inducing postpartum hemorrhage—is a conservative measure. This becomes evident when we compare its effect to the depressing influence on the patient of the prolonged and painful manipulation necessary to delivery.

The stimulating effect of ether used in the milder degree of anesthesia is shown in the record of the following case: A young primipara, on admission to hospital, gave the history of having received treatment prior to the beginning of her pregnancy, for so-called heart disease. Clinically the cardiac condition showed itself only in the physical signs. There was present a slight thrill, with diffuse impulse and accentuated second sound, accompanied by a rough, low-pitched murmur ending in the first sound—conditions indicative of mitral stenosis. The lesion apparently dated from childhood.

The gravida fell in labor without presenting any abnormality from her cardiac condition. During the second stage the expulsive pains became very severe. Suddenly, without warning, the patient became unmanageable, showing great mental excitement, with incoherence in speech. The administration of ether produced an immediately calming effect. This result was brought about probably by the stimulation of the heart's action, which overcame the cerebral ischemia responsible for the patient's excitement.

As to the second point, namely, the administration of ergot, the indications are against its use. The action of ergot in augmenting the pressure in the capillary circulation, the volume of which is greater than that of the arterial circulation, imposes a dangerous resistance to the already overburdened heart. Massage, hot douching, compression of the fundus, and the hypodermic administration of small doses of morphia, combined with strychnin, are measures preferable to the use of ergot.

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# Current Medical Literature.

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### American Journal of Obstetrics, May.

1.—*Tubercular Meningitis in Infants. Samuel S. Adams.
2.—*Vaginal Ablation in Pelvic Inflammation. Wm. R. Pryor.
3.—*Surgical Treatment of Pelvic Inflammatory Lesions by Abdominal Section. J. M. Baldy.
4.—*Clinic Data Relating to Cancer of the Uterus. Andrew F. Currier.
5.—*Extrauterine Pregnancy. H. J. Boldt.
6.—*Treatment of Eclampsia by Infusion of Salt Solution. With Report of Three Cases. L. M. Allen.
7.—*Diagnostic Value of Pain in Gynecology. Richard Lomer.
8.—*Lessons from 224 Consecutive Abdominal Sections. J. H. Carstens.

### Pediatrics (N. Y.), May 15.

9.—*Enlargement of the Liver and Spleen in Infancy. Report of Cases and Discussion of Etiology. Wm. N. Berkeley.
10.—*Developmental Influences of Play. James Herbert McKee.

### Medical Standard and North American Practitioner (Chicago), May.

11.— Technic of Ether and Chloroform Anesthesia. Aime Paul Heineck.
12.— Science vs. Empiricism in Medicine. Wm. Rittenhouse.
13.— Sir Charles Scarborough. Frank Webster Jay.

### Laryngoscope (St. Louis), May.

14.—*Remarks on Nasal Insufficiency Due to Exaggerated Prominence of the Anterior Arch of the Cervical Vertebræ. Dundas Grant.
15.—*Report of a Case of Congenital Nasal Atresia. Hal Foster.
16.—*Otological Experiences During the Naval Battle of Santiago on Board the Battleship "Iowa." M. H. Simons.

### Peoria (Ill.) Medical Journal, May.

17.— Some Comments on the Etiology of Croup and Diphtheria and Their Treatment. John C. Roberts.
18.— Case of Extrauterine Pregnancy. O. W. Will.

### Western Clinical Recorder (Chicago), May.

19.—*Bedside Notes. Cardiac Weakness. John A. Robison.
20.— Prognosis and Indications for Radical Treatment of Myomatous Tumors of the Uterus. Henry T. Byford.
21.—*Antitoxin Treatment of Diphtheria in the Cook County Hospital, Chicago. H. Gideon Wells.
22.—*Transient Paraplegia and Tetany of Gastric Origin. G. W. McCaskey.
23.—Causation and Operative Treatment of Hemorrhoids. William L. Dickinson.
24.— Notes on Urethral Stricture in the Male. H. M. Read.

### Medical Fortnightly (St. Louis), May 1 and 15.

25.—Abortive Method of Treating Bubo. After-Treatment of Urethrotomy Cases. Orville Horwitz.
26.— Venereal Diseases: Their Relative Importance in a Vital Sense. John E. Link.
27. Dressing the Wounds After Ovariotomy; Pelvic Suppuration; Submucous Fibroid. E. E. Montgomery.
28.—*Locomotor Ataxia Without Specific Cause. F. X. Dercum.
29.— Rectal Short-Stops. S. G. Gant.

### Atlanta Journal-Record of Medicine.

30.—*Fibroid Tumors of Uterus. Virgil O. Hardon.
31.— Protection Against Fradulent Malpractice Suits. Bernard Wolff.
32.—*Circumcision. Thomas H. Hancock.
33.— Use and Abuse of X-ray in Surgery. J. McF. Gaston, Jr.
34.— Multiple Neuritis from Arsenic Poisoning. Isham Harrison.
35.— Medical Uses of Formaldehyde. W. H. Hudson.

### Medical Monograph (Topeka, Kan.), April.

36.—*Proctitis and Ischiorectal Abscess. S. G. Gant.
37.—*Pruritis Ani. R. E. McAdams.
38.—*Pruritis Ani. Wellington C. Burke.
39.—*Clamp and Cautery Operation for Internal Hemorrhoids. W. O. Green.
40.— Treatment of Internal Hemorrhoids. A. B. Cooke.
41.— Diseases of Rectum as a Cause of Auto-Infection. J. R. Pennington.
42.— Non-Malignant Ulceration of Rectum. B. B. Foster.
43.— Perineal and Sacral Resection of Rectum for Cancer. D. S. Fairchild.
44.— Cancer of Rectum. J. C. McClintock.

### Chicago Clinic, April.

45.—*Lecture on Practice of Medicine. Wm. E. Quine.
46.—*Dysmenorrhea. Geo. W. Newton.
47.—*Perforating Wounds of Eyeball. Willis O. Nance.
48.—*Saturday Lessons in Neurology. Harold N. Moyer.
49.—*Bassini Operation for Radical Cure of Inguinal Hernia Without Buried Sutures. Edward H. Lee.
50.— Treatment of Adenoids and Turbinated Hypertrophies. Arthur E. Prince.
51.—*Creosote in the Treatment of Tuberculosis. J. H. Coulter.
52.—*Treatment of Tuberculosis. F. E. Waxham.

### Chicago Medical Recorder, May.

53.—*Micro-organism of Scarlet Fever. Wm. J. Class.
54.—*"Morbus Cæruleus" or "Blue Disease." Junius C. Hoag.
55.—*Transient Paraplegia and Tetany of Gastric Origin. G. W. McCaskey.
56.— Pancreatic Cyst, Adrenal Tumor, and Other Cases. L. L. McArthur.
57.—*Cases of Neurasthenia. A. McDiarmid.
58.—*Displacement of Larynx by a Goiter, Causing Dyspnea and Aphonia. O. J. Stein.
59.—*Case of Chronic Mastoiditis. Radical Operation and Closure of Internal Wound by First Intention. W. L. Ballenger.
60.—*Leiomyofibroma of Right Kidney. Report of Case, with Demonstration of Specimen. E. H. Ochsner.
61.—*Pericystitis in Puerperium. Gustav Kolischer.
62.—*Diagnosis and Prognosis of Appendicitis. C. J. Whalen.
63.—*Bassini Operation for Radical Cure of Inguinal Hernia, Without Buried Sutures. E. H. Lee.

### Kansas City Medical Index-Lancet, May.

64.— Case of Friedreich's Ataxia, with Abbreviated Clinic Digest. S. Grover Burnett.
65.— Common Cardiac Derangements, Diagnosis, Prognosis. T. F. Lockwood.
66.—*Significance of Ocular Changes as an Aid to the General Practitioner in the Diagnosis of Disease. W. H. Schutz.
67.—*Criticism of Whitehead's Operation for Piles. S. G. Gant.
68.—*Tuberculosis of Lymph-Glands—Synonym (Scrofula). J. W. Kyger.
69.— Malignant Diseases of the Stomach. A. B. Temple.
70.— Review of Recent Advances in Our Knowledge of the Anatomy and Physiology of the Nervous System. John Punton.

### Texas Medical Journal (Austin), May.

71.— Medical and Surgical Practice During the Santiago Campaign. Wm. F. James.
72.—*Some Modern Methods of Local Treatment of the Stomach and the Intestines. H. Leonards.
73.— Etiology and Treatment of Endometritis. J. S. Watson.
74.—*Value of Texas' Hot Waters. H. C. Black.

### Medical Mirror (St. Louis), May.

75.— Gastric Catarrh, Irritative Dyspepsia. J. T. Anderson.
76.— Status of Typhoid Fever. J. Parrish.
77.—*Paroxysmal Tachycardia. Albert Mackey.
78.— Case of Osteosarcoma and Tuberculosis. W. F. Chaffin.
79.— Treatment of Acute Articular Rheumatism. Robert C. Kenner.
80.—*Response to the Toast "Woman." I. N. Love.
81.— Incisional Hernia. Robert T. Morris.
82.— Make Your Old Age Best. W. R. Rothwell.
83.—*Summary of Scientific Points Involved in Churchill's Theory. R. W. Gardner.

### Iowa Medical Journal (Des Moines), April.

84.—*Gall-Stones. D. C. Brockman.

### Cleveland Medical Gazette, April.

85.—*Practical Notes on Differential Diagnosis and Management of Smallpox. Wm. Thomas Corlett.
86.— Diagnosis of Abdominal Tumors. J. F. Fox.
87.— Cases of Gall-Stones in the Cystic Duct in which the Diagnosis was Obscured by Symptoms Due to Pelvic Disturbances. Hunter Robb.
88.— Pneumonia of Short Duration. D. S. Hanson.

### Sanitarian (Brooklyn), May.

89.— Fruits of Sanitary Science. J. B. Johnson.
90.— Sanitary Condition and Vital Statistics of Nuevitas and Puerto Principe, Cuba. S. T. Armstrong.

### Memphis Medical Monthly, May.

91.— Immunity and Susceptibility. I. A. McSwain.
92.—*Some Observations on the Use of Antitoxin in Diphtheria. M. C. Sebastian.
93.—*A Practical Suggestion Regarding Amputations of the Foot. Jere L. Crook.
94.— Hippocratic Oath. A. M. Trawick.
95.— Treatment of Acute Pelvic Inflammation in Women. H. R. Coston.

### Medical Age (Detroit), May.

96.—*Leprosy is Most Certainly Non-Contagious. Roger S. Chew.
97.— Precocious Cerebral Syphilis. W. F. Wegge.
98.— Living Beyond a Century. Wm. Kinnear.
99.— Salpingo-Oophorectomy: Diagnosis Obscured by Uterus Bicornis Unicollis. Alexander MacMillan.

### Columbus Medical Journal, May 2.

100.—*Hydatidiform Mole of the Uterus. Sterling B. Taylor.
101.—*Concerning the Therapy of Grip. Hervey W. Whitaker.

### Philadelphia Monthly Medical Journal, April.

102.—*Clinic Diphtheria. Summary of Investigations Concerning Diphtheria Bacillus, Toxin and Antitoxin of Diphtheria, Including Diagnosis, Prognosis and Treatment of the Disease. Jacob R. Johns.
103.—*Hydrophthalmus: Biographic, Clinic and Pathologic Study. Walter L. Pyle.
104.—*Strontium. Horatio C. Wood and John P. Arnold.
105.—*Appendicitis. Charles J. Whalen.

### Philadelphia Medical Journal, May 20.

106.—*Case of Brown-Séquard Paralysis Appearing One Year After Syphilitic Infection. Robert Reuling.
107.—*Compression of Spinal Cord, and Spinal Hemorrhage. Albert Woldert.
108.—*Results of Examination of Blood of 90 Soldiers Ill with Typhoid at St. Agnes' Hospital. George A. Muehleck.
109.— Differentiation of Appendicitis from Other Affections in the Right Iliac and Pelvic Regions. A. A. Berg.
110.—*Case of Cardiac Thrombosis. B. Van Sweringen.
111.— Medical Libraries. William Browning.
112.— Relation of Life Insurance Companies to Public Medicine. Robert L. Pitfield.
113.— Easy Method for Calculation of Quantities in Modification of Milk. H. M. Shriner.
114.— To Make Clean the Hands and the Field of Surgical Operation with a Job. W. S. Forbes.

### Medical Record (N. Y.), May 20.

115.—*United States and Foreign Army Relations Compared. Charles E. Woodruff.
116.— Anemia as Observed in a Gynecologic Clinic, with Some Practical Suggestions on the Diagnosis of Obscure Cases and Their Treatment. W. Gill Wylie.
117.—*Some of the Essential Features in the Diagnosis and Treatment of So-called Idiopathic Epilepsy. William M. Leszynsky.
118.— An Old Plaster Splint Modified, and a New One. W. C. Hobdy.

### New York Medical Journal, May 20.

119.—*Significance of Absence of Nucleated Red Corpuscles in the Blood in Cases of Grave Anemia. John S. Billings, Jr.
120.— Retention of Urine. Ramon Guiteras.
121.— Inhibition. S. J. Meltzer.

122.—*Term Appendicitis, and other Unscientific Words of our Nomenclature. Achilles Rose.
123.—*Use of Valerianates of Creosote and Guaiacol in the Treatment of Pulmonary Tuberculosis. A. B. Briggs.

**Boston Medical and Surgical Journal, May 18.**

124.—*Cases of Diabetes Mellitus Quickly Following Mumps. On Pathologic Alterations of Salivary Glands, Closely Resembling Those Found in the Pancreas, in a Case of Diabetes Mellitus. H. F. Harris.
125.—Small Aneurysm of Descending Arch of Aorta. X-ray Examination Confirmed by Autopsy. Francis H. Williams.

**Maryland Medical Journal (Baltimore), May 20.**

126.—*Oxaluria: Its Clinical Significance. Robert F. Williams.
127.—*Erythema Scarlatinoides: A Case. J. Travis Taylor.

**Cincinnati Lancet-Clinic, May 20.**

128.—Valedictory Address. T. V. Fitzpatrick.
129.—The Physician as a Citizen. Louise Southgate.

**Medical Review (St. Louis), May 20.**

130.—*An Interesting Case of Lymphatic Leukemia. C. Fisch.
131.—*A Case of Tetanus Following Vaccination. F. E. Chase.
132.—An Epidemic of Dysentery and Diarrhea. C. C. Cronkhite.
133.—*A Method of Rendering the Hands Surgically Clean. Willard Bartlett.

**Medical News (N. Y.), May 20.**

134.—Syphilis of Eye and Its Appendages. Charles Stedman Bull.
135.—*Etiology and Frequency of Sporadic Purulent Meningitis. L. Napoleon Boston.
136.—*Recent Investigations on Malaria. W. S. Thayer.

## AMERICAN.

**1.—Tubercular Meningitis in Infants.**—Adams discusses the diagnosis and symptoms of tubercular meningitis in infants. The onset is insidious and, while the symptoms when well marked are characteristic, it is difficult in very young infants to recognize the condition in its beginning. The symptoms during the stage of irritation are hardly characteristic enough to lead even a careful physician to suspect the existence of so serious a disorder. He gives the details of four cases seen in consultation, in all of which he gave an unfavorable prognosis. (See JOURNAL, Dec. 24, 1898, p. 1541.)

**2.**—See abstract in JOURNAL, March 25, p. 663.

**3.**—Ibid.

**4.—Cancer of Uterus.**—Currier describes the forms and symptoms of uterine cancer, and states that one of the most unfortunate effects of the condition is the absence of pain until the degree of extension into the tissues that renders its extirpation impossible has been reached. Another misleading fact is the lack of physical signs of the disease in the general appearance of the patient until late in its progress. Hemorrhage is, as a rule, the first symptom. The treatment is purely surgical and is available only early in the disease. In other cases it can only be palliative.

**5.**—See abstract in JOURNAL, May 13, p. 1057.

**6.—Treatment of Eclampsia.**—Allen reports three case of this condition successfully treated with an injection of sterile salt solution, into the tissues under the mammary glands. The child was lost in two of the three cases. The theory which he adopts of the pathology of the disease is that advocated by Schmorl, that it is due to a toxin developed in the placenta. Rational treatment consists in removing the placenta and as much of the poisoned blood as possible, and substituting a solution that is sterile and much like normal blood in its properties. It rapidly permeates the system, filling the blood-vessels and furnishing something for these and the heart to contract upon. It stimulates the patient when stimulation is most needed. It flushes the kidneys and stimulates them to secretion. It feeds the hungry tissues and sets up a reaction that is wonderful to see. Blood-letting, therefore, or favoring hemorrhage to a safe extent, is one element of the treatment, and he holds that it is contraindicated only in very exceptional cases. In concluding, he mentions the line of treatment when the attack is threatened and in the actual attack. For the former he advises purgation, warm baths, milk and water diet, sedatives to quiet nervous tendencies, and close examination of the urine, quantitively for the urea. If under this treatment the symptoms do not improve or grow worse, and the urea continues diminished, interference is justified. When the attack occurs the best thing is to give morphin hypodermically, and the delivery should be accomplished as soon as possible. After delivery do not stimulate the uterus to contract, but let it remain relaxed and bleed until the patient's symptoms show that she has bled sufficiently. As soon as possible after delivery salt solution should be introduced into the tissues. As much as 700 c.c. (175 ʒ) should be injected each time. The salt solution is indicated not only immediately after delivery, but for several days following, according to the condition of the patient. Elimination by other methods, bowels, kidneys, skin, must be attended to and a milk diet should be given.

**7.—Pain in Gynecology.**—Lomer's paper is concluded in this number of the *Journal*. He analyzes the symptoms of pain in the various regions and reports cases. The main subject of his paper is hysteric pain, and he has tried to consider the symptoms when of this character and when connected with given disorders, separately, and as grouped together. He thinks that he will have accomplished the object of his work if he has called the attention of gynecologists to the fact that before they take the knife to operate on any painful affection they should bear in mind the very common occurrence of hysteric hyperesthesia.

**8.**—See abstract in JOURNAL, April 22, p. 875.

**9.—Enlargement of Liver in Infants.**—Berkeley reports six cases of enlargement of the liver, one of alcoholic cirrhosis in a child eighteen months old, one of dubious diagnosis, three of early congenital hepatic syphilis in children under 3 years old, and gives a review of a number of cases reported in the literature since 1886. The last case was apparently one of enlargement of the liver and spleen due simply to subchronic catarrhal icterus.

**10.—Influences of Play.**—McKee discusses the effect of play on the development of children. He considers that play is the best developmental agency in infancy and childhood, and that too much interference with it has a damaging effect. On the ethic side, however, there are points which need regulation, destructiveness as opposed to constructiveness. Cruelty and selfishness, which are natural in the plays of children, will have to be checked. Play unrestrained will best develop the animal, but the moral and mental side must not be neglected. The parent should act as a wise and lenient judge, recognizing the fact that he or she can not alone satisfy the child's needs.

**14.—Nasal Insufficiency.**—Grant reports, apropos to the paper of Dr. Newcomb (JOURNAL, May 13, p. 1045, ¶ 29), that he had called attention to the subject in April, 1897, and reproduces the account of his most striking case. He calls particular attention to the remarkable applicability of Quinlan's forceps and Golding-Bird's curette in such cases. He considers Gottstein's curette as unsuitable for these cases. In any case the application of instruments for the removal of the adenoids should be accompanied or preceded by an exploration by the finger.

**15.—Nasal Atresia.**—Foster reports a case of congenital membranous atresia in a child 8 years old, existing only on one side. There was a suspicion of hereditary syphilis, and treatment for this condition was first used and then the case was operated on.

**16.**—See abstract in JOURNAL, April 15, p. 820.

**19.—Cardiac Weakness.**—Robison reports a case of weak heart following yellow fever. He believes that where physical strain is eliminated in such cases, toxic agents or the reflexes of intercurrent disease will be found to be the cause. Cardiac weakness is more common than is generally supposed, and it is a good idea to keep this in mind in the treatment of infectious diseases.

**21.—Diphtheria in Cook County Hospital.**—Wells reports the results of antitoxin treatment in the contagious ward in the Cook County Hospital for four years, as a sort of supplement to the report already given by Brennecke. Only such cases are included as have recorded the presence of the diphtheria bacillus. The mortality of cases from February, 1897, to February, 1899, was 10.9. The laryngeal cases were fifty-five, with a mortality of 33.3. According to the day of administering the antitoxin the results are as follows: First and second days, cases 76, died 5, mortality 6.6 per cent.; third and fourth days, cases 86, died 18, mortality 20.9 per cent.; after the fourth day, cases 82, died 22, mortality 25.8 per cent. These figures include the whole four years from 1895 to 1899. Local and systemic treatment were used; local chiefly consists of swabbing the throat with Loeffler's solution (50 per cent.), together with gargles of chlorid of potash. No unpleasant symptoms except a slight urticarial eruption in a few cases were observed. Many cases of simple tonsillitis received the serum while waiting for the diagnosis, without any ill effects.

**22.—Paraplegia and Tetany.**—McCaskey reports a case of paraplegia with paroxysms of the limbs due to gastro intestinal autointoxication, treated by antiseptic irrigation of the colon and stomach with general hydrotherapy and brain galvanism; rapid recovery. He emphasizes two points in cases where chronic autointoxication is suspected. One is that a negative statement of the patient in regard to stomach trouble is of no value; the other, that the chemic composition of the gastric juice may be normal and yet a severe infection exist in the intervals of digestion. (See ¶ 55, p. 1165.)

**28.—Locomotor Ataxia.**—Dercum reports a case of a man aged

26 years, married, with two healthy children, whose disorder commenced two years ago and was clearly a case of locomotor ataxia. There was no evidence of specific infection. The man's habits have not been such as to expose him. Dercum believes that there is a certain percentage of cases like this, probably 10 per cent., that are not specific. The man was a railroad engineer, subject to much exposure, and he suggests that this occupation may have been the cause.

30.—**Uterine Fibroids.**—Hardon remarks in regard to fibroid tumors that they are not essentially pathologic but simply overgrowths of normal tissue. Their causation is obscure and their symptoms are due to their mechanic action. They consist of hemorrhages and such symptoms as are produced by pressure on the neighboring tissues around the fibroids, especially those that are submucous or fastened to the internal lining of the uterus, where they act as foreign bodies producing hemorrhage. It is the location of the growth that causes its peculiar symptoms. They may seriously complicate pregnancy and he mentions a case in which birth was very difficult on account of the fact that the child was entangled among five large fibroid tumors. Their treatment depends on their location and symptoms. If there are no symptoms nothing need be done. There are only two drugs that have the power of arresting uterine hemorrhage, hydrastis and ergot, and in some cases they may be effective but they fail in cases of submucous tumors. Curetting of the cavity will sometimes prove effective, but this method failing, nothing but the removal of the tumor will suffice. If it is a mere polypus its removal is very simple and a subserous fibroid is also easily removed by laparotomy. When the tumor is located within the walls of the uterus, however, especially if it involves a large part of the uterine wall so that it can not be shelled out, hysterectomy is the only resource. In a few cases removal of the ovaries has done some good and practically cured the patient.

32.—**Circumcision.**—Hancock describes a method in which he makes a double operation, taking one-half of the foreskin at a time, and claims that this method has special advantages in not interfering with the circulation.

36.—**Proctitis.**—Gant describes the symptoms and treatment of these affections. Proctitis is rare except as a symptom of some more serious condition—gonorrhea and dysentery. Occurring independently, it may be acute or chronic; children are liable to the former, old people to the latter. It may be due to any irritation. The symptoms vary with the severity of the case; any local symptoms found in any localized intestinal inflammation may be present in proctitis. A simple acute attack may be over in eight or ten days; a chronic case will last as long as the irritation that produced it exists or the local changes induced may last. When the inflammation becomes diffused in the loose surrounding tissues we have a periproctitis ending in ischiorectal abscess. The treatment consists essentially in the removal of the irritation, together with such local measures as are required. It is essential to keep the bowels open and to avoid dietetic errors. In case of abscess that can not be aborted by cold, leeches, etc., an early incision, curetting and disinfection of the cavity is best. It is important to avoid burrowing of pus and formation of fistulæ.

37.—**Pruritus Ani.**—McAdams says that while pruritus is not strictly a rectal disease, it is so frequently a complication of disorders of the rectum that it is commony classed with them. The only symptom is itching and its results; the treatment consists in removing the cause if possible—hemorrhoids, parasites, etc.—and looking after general hygiene and physical health. Local treatment is often a failure; hardly any disorder has had so many drugs recommended for it with poor results. The best local remedy, the author says, is carbolic acid with glycerin or olive oil, 20 or 30 grains to the ounce. Sulphur, tar, boric acid, camphor, menthol, etc., are also mentioned in various combinations. He thinks vaselin a poor vehicle as compared to lard in ointments for these affections. The prognosis should always be guarded.

39.—**Internal Hemorrhoids.**—Green describes the clamp and cautery operation for hemorrhoids, reviewing its advantages and answering the objections that have been made to it. He believes that the latter are really confirmations of its value and that experience only confirms the trust in its efficiency.

45.—**Lecture.**—Dr. Quine's lecture is the same, with some modifications, that appeared in the *Chicago Clinical Review*, June, 1898.

46.—**Dysmenorrhea.**—Newton describes the various forms of dysmenorrhea that are commonly met with—the neuralgic, the most frequent, and which is due probably to abnormalities of development, the obstructive, the congestive and the membranous forms. Each of these is described as to its symptoms. Most cases can be relieved, and some can be cured. The membranous form is the most difficult to treat. The treatment of dysmenorrhea is detailed. It must be constitutional as well as local; the patient must have the proper diet between the periods; the bowels must be kept regular; work must not be excessive; sleep must be sufficient; exercise should be taken and there should be no severe nervous strain. The diet should be specified according to the needs of the case. If the patient is anemic or chlorotic, iron is indicated, provided her alimentary canal is in proper condition. To give it when the tongue is coated does more harm than good. Blaud's pills, or tinctura ferri chloridi, with either dilute muriatic acid or phosphoric acid, is preferred by Newton, to the newer preparations. Electricity is very efficient as a cure for neuralgic dysmenorrhea and in many of the so called obstructive cases, and should be used first in cases with marked retroflexion. Marriage, if followed by pregnancy, cures as a rule, but it should not be recommended in case inflammatory conditions exist. Operative treatment consists of the dilatation of the os, Alexander's operation or ventrofixation in cases of retroflexion, when other means fail; and such diseases as endometritis, salpingitis and ovaritis should be looked after as the conditions require. In membranous dysmenorrhea the uterus should be dilated, curetted and afterward treated with a solution of zinc chlorid or carbolic acid or iodin. Palliative drugs to relieve the pain are numerous; among them he mentions viburnum, pulsatilla, gelsemium and cannabis indica. Kryofin and phenacetin have sometimes given satisfaction. In rheumatic cases the salicylates are used. In very severe, painful cases, rest in bed, hot drinks and hot fomentations are advised.

47.—**Wounds of Eyeball.**—Nance reports a case of a perforating wound and discusses the condition. It must always be considered as serious. Injury to the posterior chamber, the lens, or the ciliary body, is liable to be present. Asepsis must be complete. In emergency cases a thorough and careful examination should always be made and a solution of atropin sulphate be used early and continued where the cornea or iris is injured or the latter likely to be involved. Boric acid or sublimate solution should be used freely and frequently. Bandages should be applied unless there is a catarrhal or purulent discharge. Cold compresses may be used early, but later, with active inflammation, hot applications will be better. He advises, in all cases of ocular injury, attention to the following points: Carefully test the vision of both the wounded and the sound eye and record the same. In the examination and treatment, be as particular as when operating in the abdomen. Do not fail to impress your patient with the dangers of sympathetic disease in the sound eye, and if removal of the eye seems to be indicated, insist on it or withdraw from the case. In operating on a minor, obtain a written consent of the parent or guardian. When search is to be made under general anesthesia, for a foreign body within the eyeball, obtain consent for performing total excision if the body is not found.

48.—**Treatment of Neurasthenia.**—Moyer insists on the following points: obtaining of rest and sleep, regulating the diet, excluding red meats, and recommending four meals a day; the use of cold water externally, preferably the sheet rub of Winternitz, the method of which he describes; drinking regularly and plentifully of water and the free use of tonic doses of strychnia.

49.—**Radical Cure of Hernia.**—Lee describes an operation in detail for the radical cure of hernia without the use of buried sutures, thus avoiding the possibility of later infection by their presence and the difficulty of managing it. His method can not be given in detail here. He has found it to give perfect satisfaction. (See ¶ 63, p. 1165.)

51.—**Creosote in Tuberculosis.**—Coulter reports three cases treated by gradually increasing doses of creosote with good results, the number of minims taken running to as much as 100 at a dose or 300 daily. Merck's preparation was employed and seemed to be well tolerated. As adjuvants he used cod-liver oil, strychnia, etc.

52.—**Tuberculosis Treatment.**—Waxham considers physical treatment and exercise more important than drugs in tuberculosis. The proper direction of the mode of life, guarding against excesses of all kinds, improving the surroundings, avoiding overwork or worry, improving digestion and nutrition, outdoor life, cleanliness and cold sponge baths are the special indications, to be used as the case requires.

53.—See abstracts in JOURNAL, April 8, p. 765; May 20, p. 1108, ¶ 114.

54.—**Blue Disease.**—Hoag considers the etiology and gives the autopsy report of a child of 5 days.

55.—See ¶ 22, p. 1164.

57.—See JOURNAL, April 8, p. 765.

58.—Ibid.

59.—See abstract in JOURNAL, April 8, p. 764.

60.—Ibid, April 22, p. 876.

61.—Ibid, p. 877.

62.—Ibid, p. 876.

63.—See ¶ 49, p. 1165.

**66. Ocular Changes in Disease.**—Schutz concludes his continued article on the ocular changes as an aid to the general practitioner in diagnosis, with remarks on those connected with special diseases, the recognition of functional optic disorders, with report of a case of presumed brain tumor, and finishes with the following propositions: 1. Eye symptoms are of paramount importance to the practitioner in arriving at proper conclusions in diagnosis. 2. Be ever on the alert for signs of changes in the ocular apparatus, no matter how simple or complex the case. 3. Having recognized certain ocular disturbances, but not qualified to judge their significance, secure aid of an oculist before concluding the diagnosis.

67.—See abstract in JOURNAL, May 6, p. 991.

**68. Tuberculosis of Lymph-glands.**—Kyger describes the etiology, symptoms and treatment of scrofulous gland disease. The infection may reach the glands by absorption through the skin, by way of the respiratory tract or through the alimentary canal. It may be either primary or secondary; in cervical adenitis it is nearly always primary and generally so in the bronchial glands. Mesenteric lymph gland involvement is generally secondary to lung disease. The treatment consists largely of general measures for the improvement of the health and fortifying the system against the disease. Syrup of iodid of iron, cod-liver oil and the maltine preparations are commonly prescribed, and are of value. Change of climate is often beneficial. Removal of any sources of continued infection about the throat and mouth is needed. Operation in cervical adenitis shortens the disease, prevents scars and lessens danger of infection elsewhere; it is advisable in most cases. Prophylactic measures against tuberculosis are applicable and necessary for this class of cases.

**72. Treatment of Stomach.**—Leonards describes Turck's method and apparatus for the treatment of the stomach and intestines and mentions the good results which he has seen from them.

**74. Texas Warm Springs.**—Black speaks of the value of the hot springs of Waco, Texas, which he claims have the same therapeutic value as the hot springs of Arkansas and of Topo Chico at Monterey.

**77. Paroxysmal Tachycardia.**—Mackay reports a case in which there there was a pulse of 230 per minute with great distress, apparently originally due to heart strain from overexertion in a forced march during the Civil War, and which seems to have been largely neurotic, and was relieved by drinking ice-water. It was erratic in its appearance and disappearance.

80.—This address appeared in full, in the JOURNAL, May 13.

83.—This paper was printed in full, in the JOURNAL, March 4.

**84. Gall-stones.**—Brockman describes the symptoms of cholelithiasis and its complications and results. It is a safe rule to call all frequently-recurring febrile attacks of pain in the right hypochondrium cholecystitis that are not localized peritonitis or renal disorders. The prognosis depends on the character of the disease and the treatment. The treatment varies with the case. During the attack the patient should be relieved by hypodermics of morphin or, if necessary, whiffs of chloroform, and should be relaxed by hot baths. Food should be withheld and drugs are generally useless. After the stone has passed the duct, the patient should take a dram of sodii phosphate in water, two or three times a day, before meals, for months, or until cured. He describes the method of operation in cases of lodgment. The complete removal of the gall bladder is advised by some surgeons and the so called ideal cholecystotomy is theoretically best, but he thinks simple cholecystotomy the best and safest operation.

**85. Smallpox.**—Corlett speaks of the lack of familiarity with smallpox at the present time, on the part of practitioners, and the consequent difficulties in diagnosis. He points out the distinctive features between it and measles, scarlatina, impetigo, etc., and shows how a question as to diagnosis in one case had an important influence in determining military policy during the late war. The premonitory symptoms of smallpox have been also mistaken for la grippe, during an epidemic of the latter disease. Varicella is one of the disorders most frequently causing trouble in diagnosis. Its multiform and successive, but short lived eruptions, are characteristic. Syphilis has occasionally given trouble in diagnosis, but is commonly easy to distinguish. As regards treatment, Corlett thinks a well-managed, accessible, isolation hospital affords better chances than home treatment, but such are not always found. Light diet, cool baths, and in many cases stimulating remedies, are indicated. Pitting can be largely prevented by careful opening of the lesions and washing out with weak antiseptic solutions—boric acid, formalin or carbolic acid.

**92. Antitoxin in Diphtheria.**—Sebastian reports seventeen cases of severe diphtheria, mostly treated with antitoxin; one death—antitoxin not used. A large number of milder cases were treated without antitoxin. The diagnosis was on clinic symptoms in all cases. In one, eleven days after the last injection, there was fever, pain in joints, headache, and convulsions, all arrested by treatment, and recovery satisfactory; no albumin in urine. Sebastian queries whether these symptoms could have been caused by the antitoxin.

93.—See abstract in JOURNAL, May 6, p. 1000.

**96. Leprosy and Contagion.**—Chew maintains that leprosy is not contagious in the sense that it can be conveyed otherwise than by inoculation. He has been treating leprosy for twenty-two years in British India, and this opinion is the result of his experience.

**100. Hydatidiform Mole.**—Taylor discusses the origin, diagnosis, symptoms and treatment of hydatidiform mole of the uterus, and reports a case. The diagnosis is based on the customary symptoms, which are: sudden interruption of pregnancy with greatly increased reflexes and failing health, inordinate enlargement of the uterus, characteristic currant juice discharge with occasional cysts and violent hemorrhage occurring about the third or fourth month. In cases where attachment is loose the treatment may be by ergot alone, and where hemorrhage is excessive, tampon and ergot. In some cases a digital examination should be first made to ascertain if there is any thinning of the uterus wall. The blunt curette alone should be used, accompanied as far as possible by the finger, to avoid accident. After the curettement, ergot should not be neglected. Hot water will usually control hemorrhage, but if it fail the usual remedies in postpartum hemorrhage should be employed, even to the extent of applying pressure to the abdominal aorta if required.

**101. Therapy of La Grippe.**—Whittaker sums up the treatment in a general way, as follows: 1, elimination; 2, supporting the strength; 3, measures to relieve the discomforts of the patient; 4, protection from cold, work and worry, to avoid complications and sequelæ.

**102. Clinic Diphtheria.**—Johns gives a complete and exhaustive treatise on diphtheria, the subject being handled historically as well as practically. Special detail is made of the development, preparation and administration of the antitoxin.

**103. Hydrophthalmos.**—In studying the causes of hydrophthalmos, Pyle makes two distinct classes: 1, true hydrophthalmos, depending on congenital defective development of the cornea, iris or filtration channels; and 2, hydrophthalmos secondary to fetal intraocular inflammation, usually in the form of iridokeratitis or iridocyclitis and keratitis, causing closure or obstruction of the iridic angle and the filtration channels. Discussing operative treatment, the writer differs from the ordinary textbook in giving a favorable prognosis in many cases of hydrophthalmos in which operation is resorted to early.

**104. Strontium.**—In an experimental investigation of the physiologic effects of the salts of strontium on the lower animals, Wood and Arnold demonstrated that the drug acts directly both on the heart and capillaries; the action on the heart muscle is similar to its action on the voluntary muscles. They conclude that strontium is a muscle poison which stimulates the muscle and afterward paralyzes it, and that its stimulating effect on the circulation is the result of the wide spread general influence of the drug on the muscle fibers, both of voluntary and involuntary life. In view of the above conclusions, a clinic test was made to determine the value of the drug in the treatment of cardiac diseases accompanied by loss of circulatory power. Six organic cardiac cases were used for the exhibition of the drug; the therapeutic test tended to show, however, that the drug was without value in the treatment of cardiac disease. Furthermore, it was observed that only a very small amount of the strontium can be absorbed from the alimentary canal. When strontium salts were exhibited continuously for a length of time, continuing absorption leads to some accumulation in the system, which in turn produces persistent elimination through the kidneys.

**105. Appendicitis.**—Whalen makes the importance of surgical interference early in appendicitis emphatic, reviewing some 6500 collected cases classified under the headings of catarrhal, suppurative, and recurrent appendicitis, of which 1400 were treated medically. Of these 252 died, a mortality of 18 per

cent. Of the remainder of 5100, 987 were operated on during the catarrhal stage; 50 died, a mortality of 5 per cent. Of 2930 cases operated on during the suppurative stage, 526 died, a mortality of 20 per cent. There were 1483 cases of recurrent appendicitis with 35 deaths, a mortality of $2^1_4$ per cent., showing a low mortality in recurrent forms, possibly due to immunity acquired by repeated irritation. Out of 5100 subjected to operation, 1483, or 29 per cent., were recurrent forms of the disease; adding to this the 18 per cent. mortality of medically treated cases, it is shown that about 47 per cent. of cases either die or do not fully recover from appendicitis. Contrasting with this is the death rate of only $9^1_4$ per cent. of cases treated surgically by the various operators. Summarizing the opinions of eighty-five men eminent in medicine and surgery, the writer maintains that all patients with appendicitis who do not show improvement at the end of thirty six hours should be subjected to an operation—considering a delay beyond that time both dangerous and unscientific. A portion of this paper, presented before the Chicago Medical Society, was noticed in the JOURNAL, April 22, p. 876.

**106.—Brown-Sequard Paralysis.**—The paralysis in this case appeared only one year after the syphilitic infection, a typic case as far as sensory disturbances are concerned, but deviating in the absence of a pure monoplegia, as the opposite extremity was markedly paretic.

**107.—Compression of the Spinal Cord.**—Woldert points out the susceptibility of that portion of the spinal column in the region of the fifth cervical vertebra to suffer trauma. Unconsciousness is an early symptom when there is compression of the cord from fracture or dislocation. Hyperpyrexia is to be considered an unfavorable symptom when occurring several days after fracture or dislocation. In cases of hematorrhachis the symptoms may not manifest themselves for several hours after injury.

**108.—Blood Examination in Typhoid.**—Red corpuscles were found uniformly reduced in number; in only six of the ninety cases did the count reach or exceed five million to the cubic millimeter. The average count for the first week after the disease was 4,319,714, for the second week 3,875,000, for the third week 3,206,333, for the fourth week 3,191,680, while during the fifth week a gradual increase was observed—3,203,700. The reduction of hemoglobin was almost a constant feature, keeping pace, however, in a very irregular way, with the diminution in the corpuscular elimination. The reduction of hemoglobin began with the first week, reached its lowest point in the fifth, after which it began to increase. Hypoleucocytosis was noted in the majority of cases. The average count for the first week was 5358, for the second 4326, for the fourth 4400, for the fifth 4714, for the sixth 3933. Beginning in the first week in uncomplicated cases, a steady decrease in the relative number of polymorphonuclear cells, and an increase in the juvenile forms was observed, so that at the beginning of the third week this form of cell predominated; this increase concerned the large lymphocytes principally. (See JOURNAL, March 11, p. 551.)

**110. Cardiac Thrombosis.** The patient, a woman aged 38, was under observation for one year before death, and presented symptoms of cough, dyspnea, later cyanosis with edematous extremities, the heart irregular, tachycardia marked (140), attacks of cardiac dyspnea frequent and distressing; gastric symptoms eventually developed. No endocardial sounds were discernible. The postmortem disclosed a soft gelatinous growth or mass the size of a walnut, attached by a short pedicle to the auricular septum, and protruding into the left auricle, almost completely obstructing the mitral orifice, but easily displaced. On section, the growth was shown to consist of old, partly hyalin fibrin, with much blood pigment, and, in places, connective-tissue substitution.

**115.—Army Rations.**—Woodruff compares the United States rations with those of seven other countries, and states that the defect of our system is the lack of flexibility or compatibility to varying conditions, especially in time of war. The changes that have been made are in the right direction, and it is hoped that still further improvement will be made.

**117.—Idiopathic Epilepsy.**—Leszynsky outlines the diagnosis and general management of cases of so-called idiopathic epilepsy. As a general rule epilepsy is easily diagnosed, yet there are cases which may cause confusion, hysteric attacks for example, and attention should be given to the presence of hysteric stigmata in the intervals. Hysteria may complicate epilepsy, thus causing difficulty in the diagnosis. The minor attacks, or petit mal, may pass unnoticed for a long time. When the diagnosis is made, a study of the general condition of the patient is essential, and any case of reflex irritation must be rectified. Dr. Leszynsky thinks there are some cases in which epileptic attacks do not recur after the correction of disorders of refraction. The same happens sometimes after the removal of other peripheral irritation, but he believes that no permanent cure is obtained without additional hygienic and medical treatment. The removal of the ovaries he condemns, except possibly as a prevention of inheritance. Diet and metabolism should be regulated, and he believes the epileptic attacks are frequently the results of defective action in these particulars. Bromids are the standby among drugs, and the bromid of sodium is the one preferred. It should be given in doses of from 10 to 20 grains three times a day, or, when it is not tolerated, as is sometimes the case, chloral hydrate in doses of from 5 to 20 grains may be substituted. At times additions of atropin or digitalis prove more efficacious. The early recurrence of attacks after a sudden discontinuance of the bromids is a very common experience, and he illustrates this by an observation, in an epileptic ward, with seventy eight patients, where from ten to sixty fits occurred in the twenty four hours under no special treatment whatever. At the end of two weeks after the beginning of the systematic use of the bromids, fits were almost entirely abolished. Then from a failure of the supply of the drug, it was abruptly discontinued, and on the following day nearly sixty fits occurred.

**119.—Absence of Nucleated Red Corpuscles.**—Billings' paper treats of the importance of the presence or absence of nucleated red corpuscles in the blood in cases of severe anemia. In this disorder the bone marrow is overtaxed, and nucleated red corpuscles occur in the circulation. Their presence is evidence of increased activity on the part of the marrow, and in cases where there are 1,500,000 or less of red corpuscles to the cubic millimeter and nucleated corpuscles are absent, it indicates that the blood-making power of the marrow is inferior to the demands, and the prognosis is therefore necessarily grave. Where the red blood-corpuscles are above 1,500,000, the presence or absence of nucleated corpuscles is of less importance, but when they are below that number and no nucleated red corpuscles are found, a fatal result may be expected. Five cases are reported as illustrating these views.

**122.—The Term "Appendicitis."**—Rose calls attention to the bad Greek of the term "appendicitis" and maintains that it should be abandoned. He would substitute "scolecoiditis," as suggested by Gerster, or "ecphyaditis," as suggested by Morris. He also alludes to some other terms which have gotten into medical language, as being open to the same objection, among them "polyclinic," which should be "astyclinic"; pathogenic, cardialgia and hydrophobia.

**123.—Valerianates of Creosote and Guaiacol.**—Briggs states that his attention was called within a year to the two new esters of the drug creosote, namely creosote valerianate (eosot) and guaiacol valerianate (geosot). Since that time he has prescribed them whenever creosote or guaiacol have been indicated, and he reports four cases thus treated and refers to five more that have been or are still under treatment. Three of the cases were incipient tuberculosis, and two of these apparently made complete recoveries, while the third, still under treatment, promises to do the same. Of the five chronic cases, three have improved, another has received some benefit, and one has died. The four living are still under treatment. He believes that these remedies have decided advantages and are perfectly safe to be prescribed whenever creosote is indicated. The eosot and geosot are non-toxic and non-irritating. The dose is less than that of creosote—from 3 to 10 drops, and 10 to 30 minims daily. The drug always acts as a tonic and relieves dyspeptic symptoms as well as cough, expectoration, night sweats and hemorrhages. Their disinfectant properties are satisfactory in their results, and the sedative action of the valerianates is shown by their beneficial effects on the nervous symptoms.

**124.—Diabetes Mellitus Following Mumps.**—Harris states that his attention was first directed to a possible relation between a morbid condition of the salivary glands and those of the pancreas by the history of the patient, which he gives, and in which the diabetes appeared to directly follow an attack of mumps. He reports another case in full, with autopsy and microscopic examination of the organs, as showing the relation between the pancreas and the salivary glands. He concludes that diabetes may follow mumps so quickly that there is at least a strong suspicion that the former disease may be induced by the latter. On account of the close structural resemblance between the salivary glands and the pancreas, it would seem possible that a disease like mumps, which causes changes in one would sometimes produce alterations in the other. There is no well-authenticated case of pancreatic inflammation following mumps, but in at least one reported case there is a suspicion of its having done so. Inflammatory changes in the pancreas, becoming chronic, will cause disturbed functional disturbances, which in all cases, when sufficiently marked, probably lead to diabetes.

**126.**—See abstract in JOURNAL, May 13, p. 1047, ¶ 77.

**127. Erythema Scarlatinoides.**—Taylor describes this as a non-contagious eruption closely resembling scarlatina in its cutaneous manifestations, but differing in its future course. The attack comes on suddenly, probably preceded for a day or two by malaise and a slight febrile disturbance, with a decided chill and a temperature ranging from 100 to 103. Eruption appears at the same time and may occur anywhere, though generally first on the trunk, spreading over the entire body. It is generally uniform and of an intense scarlatina redness, though it may be punctate, with some pinhead vesicles. Frequently there are sharply defined patches, especially on the face. There is redness of the mucosa of the mouth and throat, the tongue is foul, and, according to Morris, rarely has a strawberry appearance. Sometimes there is burning and itching of the skin. The fever lasts only a day or two and desquamation occurs at once, sometimes in large flakes. Rarely, the hair and nails fall off. The difficulty in this disease is in the diagnosis from scarlatina, which is made generally by the absence of the strawberry tongue, slight constitutional disturbances, quick desquamation, etc. He reports a case.

**130. Lymphatic Leucemia.**—Fisch reports a case in a child of 10 years but an autopsy was unfortunately not permitted. The case is, therefore, not quite complete. In this case he does not find the slightest evidence of transitions between lymphocytes and polynuclear cells, nor could he confirm Loewit's assertion as to the presence of parasites. He considers Neusser's perinuclear granulations as artefacts due to impurities of the staining solution.

**131.—Tetanus after Vaccination.**—Chase reports a case of vaccination in a boy about 12 years of age in whom tetanic symptoms followed vaccination, on the twentieth day, followed by death in six days. He does not state any particulars in regard to the vaccination excepting that it was done by the officer of the board of health in the ordinary way with the usual precautions. The source of infection is therefore not known.

**133.—Cleansing of Hands.**—Bartlett describes the method used by him for surgical cleansing of the hands as follows: He first washes the hands as thoroughly as possible with hot water; soap and brush are then applied; next vaselin, which has been boiled in a glass jar, rubbing off the surplus with a sterilized towel, taking particular pains to rub the vaselin into the depressions around the nails and under the ends of the same. The hands may then be dipped in any antiseptic solution with the result that the exterior of this impermeable coating is rendered aseptic, while any germs that may still remain in the hands are covered up sufficiently and out of the way. Six months' experience with this method has given him confidence in its effectiveness.

**135.—Sporadic Purulent Meningitis.**—Boston reports four cases of sporadic cerebrospinal meningitis in the Philadelphia Hospital. He concludes that sporadic purulent meningitis may be the result of any pus-producing organism. In one of these cases the pneumococcus alone was found, in another the micrococcus tetragenus, and in the other two different organisms, the colon bacillus, micrococci, etc.

**136.**—See abstract in JOURNAL, May 6, p. 999.

## FOREIGN.

### British Medical Journal, May 6.

**Remarks on Differential Diagnosis of Insular Sclerosis from Hysteria.** THOMAS BUZZARD.—The writer remarks on the differential diagnosis between insular sclerosis and hysteria, and some of the symptoms on which the diagnosis depends are reviewed. The loss of power, which in hysteria is apt to be more general and more apt to be attended with anesthesia; transitory squinting which is not hysteric, and loss of vision with very slight optic atrophy all indicate sclerosis. Loss of knee-jerk, ankle clonus, intention tremor and bladder troubles more frequent than in hysteria—are also indications of insular sclerosis. In hysteric paraplegia there are certain symptoms more or less characteristic, such as anesthesia of the lower limbs, which is especially functional; absence of plantar reflex, and rapidly occurring hysteric contracture of the lower limbs. Babinski has lately called attention to the modification of the plantar reflex in which excitation of the sole causes extension of the toes, especially the big toe, which never occurs in health, or when the pyramidal system is unaffected. Buzzard has been able to confirm these observations of Babinski.

**On Physiologic Action of Cholin and Neurin.** F. W. MOTT AND W. D. HALLIBURTON.—The writers have investigated cholin, a material found in the cerebrospinal fluid, in cases of brain atrophy and especially in paresis. They have also identified this substance in the blood removed by venesection during convulsive attacks of paretics. It is not found in normal cerebrospinal fluid. It is an indication of disintegration of cerebral tissues, and when injected into the veins in a 0.2 per cent. solution it causes a marked falling of blood-pressure due to the dilatation of the peripheral vessels, especially in the intestinal area. It also causes a marked contraction of the spleen. The action of the splanchnic vessels is due to the direct action of the base on their neuro-muscular apparatus, for it continues after isolation of the central nervous system by section of the cord. It has no action on nerve-trunks and no effect on respiration. The effects soon pass off, partly on account of the dilution of the substance in the blood and possibly to chemic changes taking place in the system. It is not found in the urine. If the animal has been given morphin and atropin injections of ether or A. C. E. mixture, cholin produces a rise of arterial pressure instead of a fall, showing that one poison was thus influenced by another. This fact has apparently some bearing on paresis, in which the tension is usually high instead of low. They also investigated the action of neurin injected intravenously, and found somewhat similar effects but some marked differences. Neurin is intensely toxic to nerve-trunks and produces a marked effect on respiration.

**On Atrophic Marasmus of Nurslings—So-called Hospitalism or Athrepsy of Parrott.** ADOLPH BAGINSKY.—The author believes that the atrophic marasmus of children is due not to an infection, as has been supposed, but to the want of proper and sufficient food, in fact to starvation.

**Trachoma and Race.** MAJOR M. T. YARR.—The writer goes over the literature of the occurrence of trachoma in various parts of the world and in different climates. The Japanese and Chinese appear to be the most susceptible. The climate of high altitudes is unfavorable to its development, but there are important exceptions to this, as it has been observed at Leadville and other elevated locations. He thinks that filth, overcrowding and starvation are factors increasing the racial susceptibility, favoring contagion and lowering the power of antagonizing disease. As to its being contagious he expresses a doubt.

### Lancet, May 6.

**A Clinic Lecture in a Case of Syringomyelia.** W. S. COLMAN.—The author reports a case very elaborately and discusses the symptoms and pathology of the condition. The paper is illustrated, and also gives sections from another case which was under the care of Dr. Hughlings Jackson.

**On Some Complicated Cases of Appendicitis and their Surgical Treatment.** H. BETHAM ROBINSON.—The author mentions the anatomic relations of the appendix, and then reports four cases in which peculiar complications existed. He summarizes as follows: In a small proportion of cases of appendicitis with abscess, there is intraperitoneal extension of the liver region; pus may be either above or below the liver; and clinically there is considerable difficulty in determining when the apparent upper border of the liver is raised, how much of this is due to simple displacement upward by a fluid collection, or to a subdiaphragmatic abscess or to an associated lesion at the lung basis.

**Serum Treatment of Plague.** FRANK G. CLEMOW.—The writer remarks on the treatment of plague patients in Bombay, with the Yersin-Lustig serums. The mortality with the former was 80 per cent., and it seems to make but little difference at what stage of the disease it was used. He concludes that however effective other serums may be, this one is not the specific for the disease. The doses given were increased to 60 c.c. (15 ʒ) per day, and he believes that the serum is absolutely ineffective. While he had fifty persons under treatment with the Yersin serum, only thirteen were treated with the Lustig preparation. The number, therefore, is rather small to form an opinion on, but the results were very similar to those treated with the other material.

**Foreign Bodies in Pharynx and Esophagus.** ROBERT JONES.—The treatment of foreign bodies in the esophagus is discussed in this paper, and the author believes from his experience: that bodies which have lain for some time and given rise to symptoms of obstruction, irritation, or dyspnea, should be operated upon without delay; that forcible attempts at extraction by the mouth are to be condemned; that sharp or irregular impacted bodies specially demand esophagotomy; that in certain cases gastrotomy is indicated, and in some a combination of gastrotomy and esophagotomy; that where the wound in the esophagus is jagged or its walls inflamed, no stitches should be used; that the routine practice, where the esophageal wound is clean-cut, is to stitch it up with a continuous suture, care being taken, as in the case of the intestines, not to pierce the mucous coat; that only in very exceptional cases, where no danger of suppuration and infection exists, should the exter-

nal wound be closed; and that liquid food may be given by the mouth in about twenty four hours after operation.

**Carbolic Acid as a Test for Albumin.** WALTER COLQUHOUN.—The author has found a saturated solution of carbolic acid in absolute alcohol a test equaling in delicacy the nitric acid test. He floats a few drops of the test solution on the top of the fluid to be tested, by means of a pipette. Owing to the greater solubility of carbolic acid in alcohol than in water, the layer of test fluid on the surface becomes opaque, owing to the separation of carbolic acid, as water is imbibed between the urine and the alcohol. As the alcoholic solution of carbolic acid imbibes more water and becomes heavier, milky looking drops may detach themselves and fall to the bottom of the test-tube. If much albumin is present, the whole of the fluid to be tested may become milky and the alcoholic layer may settle quickly to the bottom of the test-tube, with large, milky-white drops attached to it. In case, however, of only a small quantity, the test-tube must be allowed to lie for some time, as in the nitric-acid test, and the presence of albumin will be denoted by a milkiness extending a certain depth below the alcoholic layer. He made a series of tests to determine the delicacy of this method, and found no fallacies not avoidable by careful manipulation, and he can speak with certainty as to the presence or absence of albumin, with this test, while formerly it was impossible for him to do so.

Progres Medicale (Paris), April 29.

**Present Treatment of Surgical Treatment of High Myopia by Removal of the Lens.** A. KOENIG. The advantages of removal of the lens in progressive myopia are extolled by Koenig, who urges the profession to enter on a crusade to educate the public in respect to the benefits that may be derived from it. Vision has always been improved, and detachment of the retina, the most serious consequence to be feared, is a rare occurrence. Parinaud has observed it only once; Pflueger once in 100 removals; De Wecker once and Fukala never. The operation is especially beneficial to subjects whose myopia prevents their earning a subsistence. He endorses Vacher's formula for the age indication: "Operate in the case of a child whenever there are as many D. as the child has years plus one"; 14 to 15 D. has been accepted as the limit, but the indications must depend on the age, as the myopia may continue increasing. The standard for vision has been accepted as $^1/_{10}$, but as vision even below this sometimes improves, this indication is not absolute. The counterindications are more precise: the operation should be rejected whenever there are too extensive choroidal lesions, changes in the transparent media, macular atrophy or pronounced amblyopia from strabismus. [Members of the ASSOCIATION will remember Harlan's two cases of high myopia cured by traumatic removal of the lens: one had a vision of $^{20}/_{50}$ thirty-three years later (see JOURNAL, xxvii, p. 1133 and xxxii, p. 492). Fukala recently reported a couple of cases, one with —33 D., the other —11 D., in which the removal of the lens produced the surprising result that each is now practically emmetropic. *Wiener Klin. Rund.*, April 23.—ED.] Koenig advocates simple linear extraction up to 30 or 35 years of age. After this age a flap extraction is more prudent. Discission is dangerous; liable to cause cyclitis, iritis and glaucomatous accidents and uselessly increasing the number of interventions which should at all costs be restricted to the utmost. The advantages of peripheral section are the perfect coaptation and rapid cicatrization. The essential point is to extend it a little beyond the limit of the transparent portion of the cornea, the triangular knife preferred. After wide circular discission of the capsule the fragments of the lens are removed with the curette, with slight pressure on the opposite side. He is now experimenting with a process to render the transparent substance opaque and thus visible, which would much facilitate the technic of removal.

Semaine Medicale (Paris), May 3.

**The "Convulsive Tic Disease."** GILLES DE LA TOURETTE.—This essentially chronic affection was described as a distinct morbid entity by the writer fifteen years ago, but is still constantly being mistaken for chorea, leading to erroneous prognosis and treatment. It always has a neuropathic foundation, although the intelligence may be above the average. It commences long before puberty, usually in the seventh to ninth year. The twitchings are abrupt, sudden, brief, more or less regular and co ordinated, usually involving only the muscles of the face or shoulders, and can be prevented or suspended for a few minutes by an effort of the will, although then recurring with redoubled intensity. They also persist to a slight extent between the pronounced paroxysms. As the spasmodic contraction occurs, the subject makes an involuntary exclamation, oh, ah, hum, and as this tendency increases with age, it forms one of the most characteristic symptoms, taking the form, in some persons, of repeating the word last heard—echolalia—but in the majority consisting of the loud, unconcerned utterance with the spasm of some obscene or opprobrious term—coprolalia. A number of observations are related, including a lawyer, a merchant, young ladies, and married women. Catrou's thesis in 1890 contained twenty-six unpublished observations. The prognosis is grave. The tics become a function of the individual as it were, but treatment of the underlying nervous and mental condition, a country life, isolation, will abate the symptomatic manifestations.

**Cocainization of Spinal Cord. A New Method of Anesthesia.**—A. BIER. The theoretic assumption that cocain introduced directly into the spinal cord would temporarily suppress the functions of the ganglion cells of the nerve roots and sheathless nerves has been fully confirmed by the results in various experiences. One half to 3 c.c. of a .5 to 1 per cent. solution of cocain were introduced into the spinal cord through a lumbar puncture. In five to eight minutes the analgesia of the lower members was complete, extending then to the nipple line or including the entire body except the head, and continuing for about forty-five minutes, when it gradually passed away. Besides experiments on himself and his assistant, six patients were thus anesthetized and extensive osteotuberculous or myelitic foci evacuated and bones resected without the slightest pain, although tactile and thermic sensation was retained. There were no immediate disturbances in any case, but in three there was vomiting and an intense cephalalgia later, probably due to the presence of a heterogeneous fluid in the circulation. During the experiments on himself, Professor Bier lost quite a large amount of the cerebrospinal fluid, requiring nine days in bed before he could stand without vertigo. The original communication is in the *Deutsch Ztft. f. Chir.*, li, 3, 4.

Muenchener Medicinische Wochenschrift, May 2.

**Large Amount of Ammonia and Other Nitrogenous Elements in the Soil Immediately Before the Cholera Epidemic at Hamburg in 1892.** MAX V. PETTENKOFER.—The discovery of quantities of copper nitrates under the street and sidewalk, produced by electrolysis from copper electric wires under peculiar circumstances, is described by Pettenkofer as additional proof that the epidemic was due to the condition of the soil rather than to the drinking-water. Recent English reports also confirm this point of view. He mentions as another proof the fact that Munich ceased to have epidemics of typhus as soon as an efficient sewerage system was introduced, although the drinking-water remained unchanged. He appeals for further investigation in this line, instead of placidly accepting theories for facts, urging young blood to the task.

Centralblatt f. Chirurgie (Leipsic), May 6.

**To Locate Foreign Bodies with the Roentgen Ray.** R. GALESZZI.—In the contrivance illustrated in this article, the fluorescent screen and Crookes' tube are fastened together in a frame, so that the center of the tube is exactly opposite the center of the screen, where there is a small hole with a graduated millimeter scale. The distance between the tube and screen thus being a constant figure, comparison of the distances between the points marked on the skull through the hole, as the foreign body is radiographed at various angles, locates it with mathematic accuracy.

Deutsche Medicinische Wochenschrift (Berlin), May 4.

**Atrophy in Infants.** A. BAGINSKY.—The writer has established that this condition, "English marasmus," is the result of an atrophic change in portions of the intestinal canal, disturbing assimilation and tending secondarily to autointoxication and a predisposition to infection. The mucous membrane, the villi and the crypts of Lieberkühn swell and proliferate until completely destroyed in the atrophied patches which alternate with sound regions. The bones are not rhachitic.

**Surgical Treatment of Ascites.** TILMANN.—A case was recently reported by Talma in which an acute Bright's disease and liver affection in a nine year-old lad, causing occlusion of the vena porta, was entirely cured by three laparotomies during which the gall-bladder, the great omentum and the spleen had been fastened to the abdominal wall. Between the point operated on and the intercostal veins a number of subcutaneous veins had developed, thus establishing a collateral circulation to which the recovery was evidently due. Tilmann has established the correctness of this assumption by experiments on dogs in which ligating the vena porta or mesenterica proved fatal in every case except when the abdomen had been previously opened and adherences produced between the omentum, intestines and abdominal wall, thus causing the development of a collateral circulation. He concludes that obstruction of the portal circulation, cases of cirrhosis, and all inoperable tumors compressing the vena porta, may be benefited to a

remarkable extent by a simple surgical operation to produce collateral circulation.

**How to Treat Furunculosis.** A. PHILIPPSON.—Even the severest cases yield to the application of salicylic acid, either in the form of a 50 per cent. plaster, renewed three times a day, or after thermocauterizing the center of the abscess, introducing pure salicylic acid on a toothpick before applying the plaster. If extensive regions are involved the entire surface is rubbed three times a day with a 2 per cent. alcohol solution of salicylic acid, or a 2.5 per cent. salicylized vaselin once a day. With this treatment the abscess rapidly ripens and the core can be expelled in twenty four hours, while the immature furuncles subside and all further infection is prevented.

St. Petersburger Medicinsche Wochenschrift, April 29.

**Effect of Bacterial Proteins and Deuteroalbumose on Leprosy.** E. SOONETZ.—The failure of the Carrasquilla serum treatment for leprosy (see JOURNAL, xxix, 490, and xxx, 745) to accomplish more than a temporary improvement has also been the fate of tuberculin in the treatment of leprosy. But the temporary improvement is unquestionable. Professor Dehio is inclined to consider this benefit the result of the injection of the albumoses in the serum and the tuberculin, and that any bacterial protein or albumose would prove equally effective. Soonetz reports a number of experiences undertaken at his clinic to determine this question, which establish that persons affected with leprosy react to the injection of such substances with an elevation of the temperature and general disturbances, while there is no reaction in the case of healthy persons. They also establish that the effect on tuberculous and leprous subjects is identic with that produced by Koch's tuberculin. The substances used were the aqueous extract of the bacillus pyocyaneus, the protein of the bacillus prodigiosus and deuteroalbumose. The results encourage further research in this line, which may lead to the successful application of these substances to the therapeutics of leprosy.

# Societies.

## COMING MEETINGS.

AMERICAN MEDICAL ASSOIATION, Columbus, Ohio, June 6-9.
American Academy of Medicine, Columbus, Ohio, June 3.
American Medical Editors' Association, Columbus, Ohio, June 5.
American Dermatological Association, New York City, May 30, 31, June 1.
Association of American Medical Colleges, Columbus, Ohio, June 5.
Indiana State Medical Society, Indianapolis, June 1.
Indian Territory Medical Association, So. McAlester, June 20 and 21.
Maine Medical Association, Bangor, June 7.
Massachusetts Medical Society, Boston, June 13.
Medical Society of Delaware, Wilmington, June 13.
National Confederate State Medical Examining and Licensing Boards, Columbus, Ohio, June 5.
North Carolina, Medical Society of State of, Asheville, May 30.
Oregon State Medical Society, Portland, June 13 and 14.
Rhode Island Medical Society, Providence, June 1.

**LaPorte County Medical Society.**—At the recent meeting of this society, held at LaPorte, Ind., the old officers were re elected as follows: president, Horace Wardner; vice president, John J. Kerrigan; secretary and treasurer, E. L. Annis.

**Parke County Medical Society.**—The annual meeting of this society was held recently at Rockville, Ind. The following officers for the ensuing year were elected: president, A. Martin; secretary, W. H. Gillum; treasurer, C. C. Morris.

**Arkansas State Medical Society.**—At its recent meeting (see JOURNAL, May 20, p. 1111), the following officers were elected: president, C. Watkins, Little Rock; secretary, Frank Vinsonhaler, Little Rock; treasurer, J. J. C. Thompson, Pine Bluff.

**Dubois County Medical Society.**—This society held its semi-annual session at Huntingburg, Ind., May 10, and elected the following officers: president, E. G. Luke Meyer, Huntingburg; vice-president, L. B. Johnson, Ireland; secretary and treasurer, C. R. Ramsbrok, Huntingburg.

**Ohio State Pediatric Society.**—This society met at Springfield, Ohio, May 9, and will meet next year at Columbus, just preceding the session of the State medical society. The society elected officers as follows: president, T. Clark Miller, Massillon; first vice-president, W. S. Philips, Belle Centre; second vice-president, Bennetta D. Titlow, Springfield; secretary, D. S. Hanson, Cleveland; treasurer, J. B. McGee, Cleveland.

**Wayne County Medical Society.**—On May 18, about sixty members of this society visited, by invitation of the Washtenaw County Medical Society, the Michigan University at Ann Arbor. Clinics were held in the University Hospital by Drs. Flemming Carrow and C. B. Nancrede, in ophthalmology and surgery respectively. In the evening Dr. and Mrs. J. A. Wesinger gave a reception to the two societies.

**Iowa State Medical Society.**—The forty-eighth annual meeting of this society was held at Cedar Rapids, Iowa, May 17-19. Officers were chosen as follows: president, C. J. Maxwell, Keokuk; first vice president, H. B. Criley, Dallas Center; second vice-president, G. E. Crawford, Cedar Rapids; secretary, J. W. Cokenower, Des Moines; treasurer, George R. Skinner, Cedar Rapids. The next meeting will be held at Des Moines.

**Medical Society of Pennsylvania.**—At the annual session, May 17, at Johnstown, Pa., this society chose Wilkesbarre for the meeting next year. The following officers were elected: president, George W. Guthrie, Wilkesbarre; vice-presidents, S. S. Towler, Marionville; John C. Sheridan, Johnstown; W. H. Hartzell, Allentown, and I. P. Klingensmith, Blairsville; secretary, G. L. Stevens, Athens; assistant secretary, E. V. Buckman, Wilkesbarre; treasurer, George Benson, Dunmire.

**Brazos Valley Medical Association.**—This association met at Marlin, Texas, May 9-11. The next session will be at Hearne, Nov. 14, 1898, and the following are the officers: president, I. P. Sessions, Rockdale; first vice-president, W. P. Gilstrap, Wheelock; second vice-president, W. T. McKnight, Marlin; treasurer, J. W. Hudson, Milano; secretary, W. B. Briggs, Easterly. A resolution was passed urging the passage of the bill now before the Texas legislature, or a similar bill, raising the requirements for medical practice in Texas.

**Missouri State Medical Association.**—The forty second annual meeting of this association was held at Sedalia, Mo., May 16-18, and the following are the newly-elected officers: president, W. B. Dorset, St. Louis; first vice-president, J. F. Binnie, Kansas City; second vice president, G. M. Nichols, Higbee; third vice-president, W. C. Overstreet, Sedalia; fourth vice-president, C. R. Day, Mayview; fifth vice-president, E. L. Priest, Nevada; recording secretary, B. C. Hyde, Kansas City; assistant recording secretary, Jesse S. Myer, St. Louis; corresponding secretary, E. L. Cave, Mexico; treasurer, J. F. Welch, Salisbury. The meeting next year will be held in Mexico, Mo., on May 18.

**Charity Hospital Alumni Association.**—The fifth annual meeting of this association was held in New Orleans, La., May 15, 1899. Dr. W. E. Parker read a historic sketch of the hospital, and the annual oration was delivered by Rev. Dr. Beverley E. Warner. The following officers were elected for the ensuing year: president, Charles Chassaignac; vice president, L. M. Provosty; secretary, Jacob Barnett; treasurer, M. H. McGuire. Drs. E. L. McGehee, E. D. Fenner and Herman B. Gessner were elected to serve on the executive committee with the president and secretary, who are ex-officio members. The meeting terminated in a banquet, which did much to promote the good-fellowship which is one of the main aims and objects of the association.

**Ohio State Medical Society.**—At the recent meeting of this society, Dr. Rufus B. Hall of Cincinnati was elected president for the ensuing year. Dr. A. J. Thompson, also of Cincinnati, was retained in his position of secretary. The annual address on surgery on the sickness of the late war was delivered by Dr. P. S. Conner. The society passed resolutions requesting the State board of health to investigate the spread of contagious diseases through the infection of railroad coaches and street cars. The election of officers resulted as follows: president, Rufus B. Hall, Cincinnati; first vice-president, John H. Rodgers, Springfield; second vice-president, C. E. Beardsley,

Ottawa; third vice-president, D. G. Wilson, Ironton; fourth vice-president, S. B. McGavern, Cadiz; secretary, J. A. Thompson, Cincinnati; treasurer, James A. Duncan, Toledo. The meeting next year will be at Columbus, but the date is not fixed. A committee was also appointed to petition the legislature to provide means of inspecting dairies to prevent the spread of consumption, scarlet fever and typhoid fever. Dr. M. P. Dandridge of Cincinnati presented a resolution that a committee be appointed to prepare an amendment to the present law requiring every one who wants to practice medicine in Ohio to be examined by the State board, before certificates be issued to them. This passed and the following committee was named; M. P. Dandridge, Cincinnati; C. C. Clark, Columbus; L. B. Tucker, Cleveland.

**St. Joseph (Mo.) Medical Society.**—At the regular meeting May 9, Dr. George Nash of Marysville reported a case of compound, comminuted fracture of the femur in which necrosis ensued, requiring operation. Treatment extended over a period of nine months, and resulted in perfect union, good use of limb and no shortening. Dr. Jacob Geiger read a paper on cancer. The Doctor argued that since cancer is increasing among Anglo-Saxons, it should receive more attention, closer study and investigation. All cancers spring from embryonic epithelial cells. The cells may wander and growths be found in places where epithelial cells have no province. Under irritation the cells reproduce rapidly, each crop being of lower vitality successively, until, in extreme cases, the disproportion between vascular elements, connective tissue and cancer cells is so pronounced that the encephaloid type exists, being practically a mass of free cancer cells. The older the person and slower the growth, the more favorable the prognosis. When secondary deposits appear, operation should be discountenanced. Young people succumb in three or six months. Sarcoma arises from connective tissue cells and is never encapsulated; carcinoma always.

**Detroit Medical and Library Association.**—At the meeting May 15, Dr. Fritz Maass read a paper on "The Treatment of Severe Septic Processes of the Extremities." The Doctor's motive for writing the paper was an experience with a few fatal cases of sepsis due to strepto- and staphylococcus infection, originating from insignificant wounds or sores. The treatment had been rest, small incisions, poultices and ice-bags. Rest, he said, is the first requirement in these ailments and frequently leads to rapid restoration. Symptomatic and etiologic treatment is also necessary. Heart stimulants are rarely required if the etiologic treatment is properly conducted. We can never be sure that heart-failure will not be more severe after the stimulant effect has passed off. The etiologic treatment is expected to destroy, attenuate or eliminate the microbes or their toxins. Antiseptic solutions do not reach the microbes deep within the tissues. Nature's method is by suppuration, and if poultices favor this process such treatment is etiologic. The ice-bag, as it lowers to a temperature unfavorable for microbic growth, must also be so classified. But more effective treatment must be resorted to when these fail. The prevention of local accumulation of the toxins is indicated on the theory that such accumulation prevents leucocytosis; so the affected extremity should be elevated. When this is insufficient, or if swelling is alarming, surgical means must be used. Under narcosis divide the affected area by one or more incisions, making the operation thorough. In cases which seemed to be of a progressive character arrest and improvement always followed if this line of treatment was employed at an early stage. Amputation is justified in cases too far advanced for the above treatment, or where it has failed. To decide when this has become an unavoidable and still hopeful necessity is exceedingly difficult in all progressive cases. It is different if the process has become subacute. The necessity for amputation is more apparent, and the operation is certainly more hopeful. In conjunction with operative procedures, a reliable agent to neutralize the effect of the toxins that have entered the system is desirable, and streptococcus antitoxin has been favorably spoken of in the medical press as such an agent. Some deny the efficiency of such antitoxin and many competent authorities are silent. The Doctor refrained from criticism, but admitted that he does not feel safe to use it. As we have nothing to destroy the toxins directly in the circulation it remains for us to favor nature in its efforts. That water is the best remedy for such patients is well known, and the patient shows by his thirst how much he needs it to dilute, destroy or eliminate the toxins. As to nourishment, there is no need for it at all during the first most acute stage, which lasts from eight to ten days. As soon as danger from vomiting, diarrhea and food decomposing in the intestine is past, then systematic feeding must be given.

## Illinois State Medical Society.

*Abstract of Proceedings, Forty-ninth Annual Meeting, held at Cairo, May 16, 17, and 18, 1899.*

FIRST DAY—MORNING SESSION.

SECTION ON PRACTICE.

Chairman, Dr. A. C. Cotton, Chicago; secretary, Dr. H. W. Woodruff, Joliet.

SERUM THERAPY.

Dr. GEORGE F. BUTLER of Chicago delivered an address on this subject, and stated that great progress has been made during the past year in the field of serumtherapy, though much remains open to question, and many things can not yet be explained. For a better understanding of the antitoxins and their therapeutic application, a few essential facts should be borne in mind. An antitoxin is not the direct result of bacterial action, but is properly described as an unknown body resulting from the resistance of healthy organisms to the toxins of pathogenic bacteria. In practice this antitoxic body comes to us in the blood serum of animals, usually the horse. When properly prepared and properly kept in aseptic containers, the antitoxins are not at all dangerous; in fact, are as harmless as an equal amount of blood serum or normal salt solution, administered in the same way. Antitoxins are used to resist the effects of infection with pathogenic bacteria, because the results of such infection are due to the toxins elaborated by those bacteria, and not to the bacteria themselves. Antitoxins do not destroy the bacteria; in other words, they are not germicides. The antitoxic serums are themselves good culture-media. One theory of their action is that they neutralize the toxins, thus giving the natural bactericidal powers of the body an opportunity to exercise their function. The author then gave a brief description of the process employed in the laboratory of Parke, Davis and Company, which showed that he is justified in the above definition of an antitoxin.

As to the therapeutic action of antitoxin, little or nothing is known positively. It seems reasonable to conclude from experimental evidence that the antitoxin neutralizes the toxins in the body, and thereby gives the natural germicidal powers an opportunity to dispose of the bacteria. It may be that it has the additional property of stimulating the phagocytic and possibly other bactericidal functions. Dr. Butler then narrated the experiments made by Messrs. Martin and Cherry in England, which are described in an editorial in the JOURNAL, Aug. 27, 1898. He also mentioned further experiments which were made to prove the theory that toxins are albumoses and antitoxins globulins, but these experiments do not appear to be conclusive. The supposition that the administration of antitoxin is followed by a stimulation of the germicidal powers of the body seems to be reasonable, at least in the case of the antistreptococcic serum, since the streptococci disappear with the passing away of the signs and symptoms.

The present status of diphtheria antitoxin may be said to have established itself as a specific in the treatment of this disease. During the past year the use of larger doses has become more general, and it seems certain that better results are obtained. The administrators of the Chicago Department of Health give 2000 units in all cases of suspected diphtheria, and employ 1000 units as an immunizing dose. During the months of November and December, 1898, this department treated 219 cases of bacteriologically proven diphtheria—all charity cases—with a death-rate of 4.1 per cent. Some two and a half

years ago, when antitoxin was not used, the death-rate from diphtheria treated by this department was about 35 per cent.

Reference was then made to several contributions to the literature on antitoxin.

Foreign serums have shown themselves to be inferior to the American in some respects. This is due: 1. To the fact that the foreign antitoxin has been shipped a long distance. 2. The technic of production is not so perfect. 3. The European manufacturer regards the market in the United States in the light of an orange—to be sucked as dry of profit as possible in the shortest time.

Dr. Butler referred at length to the advances made in the science of pharmacy, saying that a great step in advance of this science is the accurate estimation of the activity of various drugs by testing them upon living animals.

### VARIATIONS IN THE MANIFESTATIONS OF MALARIA.

Dr. CHARLES D. CENTER of Quincy read a paper on this subject, pointing out that malaria is a generic term, embracing several distint and different manifestations of disease, caused by separate and different parasites, these parasites differing in age, habits and many morphologic characteristics, these differences causing the various manifestations recognized in the clinic study of the disease, and necessitating the use of other remedies than quinin for satisfactory and permanent relief.

### DIAGNOSIS OF LOCOMOTOR ATAXIA.

Dr. HUGH T. PATRICK of Chicago had seen a number of cases of locomotor ataxia which were unrecognized, and several others that were falsely diagnosed. The inco-ordination in locomotion is not by any means among the earlier symptoms. Patients do not primarily consult a physician for inco-ordination in locomotion, and the modern diagnosis should not be based on this symptom. By far the most frequent and earliest symptoms are the lancinating pains; but there are other pains, paresthesias and discomforts of various kinds. These occur early in the disease. But the typic shooting, stabbing, very intense, intermittent, paroxysmal pains are the most frequent manifestations in which this disease makes its debut. He mentioned one case that had been diagnosed as sciatica and chronic neuralgia by several physicians, the man having the pains for twenty-five years. Among other symptoms mentioned by the author were trouble with the bladder, gastric crises, loss of knee-jerk, loss of pupillary reflex, lightning-like pains, analgesia of the legs, etc.

### A NEWER PATHOLOGY OF EPILEPSY.

Dr. DANIEL R. BROWER of Chicago read a paper on this subject. A flood of light has recently been thrown upon the pathology of epilepsy by Dr. Krainsky of Charcow. He has confirmed the observations of Haig as to the relation of uric acid elimination to the epileptic seizures. He asserts with emphasis that the occurrence of a seizure without a diminution of uric acid is impossible. Epileptic seizures will not occur when 0.6 to 0.8 grams of uric acid are excreted daily. If the daily quantity of uric acid excreted falls below 0.45, or especially below 0.35 grams, a seizure is usually to be expected with certainty on the third day. Epilepsy is therefore to be considered not as a purely nervous disease, but as an anomaly of metabolism which has its basis in a contamination of the organism by a product of metamorphosis. Dr. Krainsky, by a series of experiments, demonstrated that epilepsy is an intoxication, and that the poison is in the blood. By injecting blood drawn from a patient in the status epilepticus into a rabbit he produced violent epileptic seizures two to three minutes later. Blood drawn from the same patient after the seizure, injected into the rabbit produced no effect. The quantity of blood necessary to produce the seizure in the rabbit was exceedingly small, 1 to 3 c.c. demonstrating the virulency of the poison. These results were verified by numerous experiments. He then proceded to determine what this toxic agent was. While satisfied that it was not uric acid, he reached the conclusion that it was closely related to it, and by very ingenious argument and experiments demonstrated that it was carbamate of ammonia, carbamic acid, $CONH_2OH$, being carbonic acid in which $NH_2$ takes the place of OH, and is an intermediate stage of albumin metamorphoses; that the nature of epilepsy consists in the periodic formation of carbamate of ammonium in the organism, which produces the seizure and is decomposed into urea and $H_2O$ during them, so that the great problem is to determine the cause and place of origin of this abnormal metamorphosis. He explains the benefits of the bromids of potassium and sodium, not only by their sedative effects on the nervous system, but by the ease with which they decompose the carbamate of ammonium, forming ammonium bromid and the carbamate of potassium or sodium salts, which are harmless.

The difficulty in curing epilepsy by the bromids arises from the fact that they have no direct effect upon the abnormal metabolism, but simply serve to neutralize the poison produced, and quiet the nervous centers. The carbamate of ammonium, the offending material, being a product of abnormal nitrogenous metamorphoses, and being transformed into urea or uric acid, will serve to emphasize the dietetic treatment of epilepsy, and make manifest the necessity of the least amount of nitrogenous food consistent with the vital processes, and of the cutting off of sugar in order that the nitrogenous metabolism may be more perfect. The condition of the digestive canal should always be inquired into and purgation and gastro-intestinal antiseptics used from time to time. Systematic muscular training by equalizing the circulation and stimulating tissue metamorphosis in general must not be overlooked. In the use of bromids, pushing the remedies to a possible mental deterioration should always be avoided, remembering that an occasional epileptic explosion which readjusts metabolism is much to be preferred to the mental and physical damage done by too large doses of sedatives.

### ACUTE ANTERIOR POLIOMYELITIS.

Dr. ELBERT WING of Chicago followed with this paper. He said that Charcot had taught that acute anterior poliomyelitis is primarily a parenchymatous inflammation of the ganglion cells of the anterior horns of gray matter in the spinal cord. Much evidence has accumulated since Charcot's teaching was new to show this disease is an inflammatory process of vascular origin and probably of an infectious nature. The object of the paper is to present a brief review of this evidence, which the author classified as anatomic, pathologic and clinic.

Coming to the treatment, he said that the initial stages of the disease should be dealt with as those of any other acute infectious malady, resorting to antipyretics, cathartics, diuretics, anodynes, and nervous sedatives, *pro re nata*. Patients should be kept as quiet as possible. As soon as danger of inflammatory reaction has passed, the paralyzed muscles should be exercised. Electricity is valuable for this purpose in cases in which patients will submit to its use in currents sufficiently strong to be efficient. Massage is of the greatest value. It should be as thorough as the case permits. It should be continued as long as any improvement is noted, or until no retrogression follows its abandonment. In some cases, this is much longer than a year. Passive exercise is secured by electricity and massage. Active exercise, when possible, is the best and should be encouraged in all possible ways, stopping always short of continued fatigue; transplantation of tendons, care in the prevention and correction of deformities, as indicated. The physician should never forget the admonition of Gowers, that after six months, so far as the case is concerned, the lesion has become a cicatrix.

### POST HOC, PROPTER HOC.

Dr. W. J. CHENOWETH of Decatur read this paper and summarized as follows: Cures of diseases have, at all times, more frequently been credited to antecedents than to causes. Epidemics of diphtheria, occurring before antitoxin was known, produced no greater mortality in mild cases than they do at this time. Severe cases, caused by sepsis, are not controlled by it, and stenosis from laryngeal deposit can not be relieved except by mechanic measures. Antitoxin has but a single specific effect, that of neutralizing the toxin, and claim to this must be established by the fact that the clinic symptoms indicated that the toxin affected the system. The presence of diphtheria bacilli can only be corroborative and not pathognomonic. Diphtheritic croup may be prevented by the administration of antitoxin, but can not be cured by it.

### CURRENTS AND COUNTERCURRENTS IN MEDICINE.

Dr. T. J. PITNER of Jacksonville delivered the president's address, selecting this subject. He considered the character and fundamental principles of the profession, saying that the practice of medicine is as old as the history of the human race. Principles and standards have sometimes been reduced to a code of ethics which gives them definitions and tend to a clearer view and more considerate conduct, ministering to the best interests of doctor and patient. These high principles and interests need definition and safeguarding; they need reiteration and emphasis because the commercial spirit and the current of sordid ambition constantly assail the struggling physician, tending to sweep him off his solid footing of principle and submerge him in selfishness and dishonor. It is said there are tricks in all trades. Doctors, regular doctors, are human and liable to swerve from the line of duty and honor, and resort, to some extent, to the devices of quacks, who seem so successful in plying their arte. Medical ethics are simply the statement of honorable procedure in circumstances pertaining to the relations of physicians with each other and with

their patients. It is an application of the principle of the Golden Rule to professional life; a definition of what is just and right in the peculiar relations of the physician. These circumstances are not readily comprehended by laymen, hence they often misunderstand and say that physicians are sticklers for etiquette and are hypersensitive.

A countercurrent within the profession is the growing tendency to prescribe nostrums. Many preparations, the composition of which is not definitely known, are used by regular physicians. This practice should be condemned as unprofessional.

Another tendency of the time which calls for protest is the rush among young doctors for specialties. Specialism not founded on a wide general knowledge of medicine, a knowledge made available by direct observation and practice for years, has no legitimate basis. The human body is a unit. It is likely to be affected in many of its organs and functions at the same time. A general morbid process and some local disease often occur together. A variety of factors are to be considered and understood, to treat properly what may appear to be a local disease only. Not to know these predisposing and general conditions is to be disqualified as a specialist.

Another evil calling for loud protest is the multiplication of medical schools, and a shocking scramble and bidding for students in some of them. These little schools can not be well equipped to do the thorough work now required for qualified physicians. He could see no reason for such movements. The promoters of some of these schools used them as a means of advertising themselves. Think of the influence of a school where the professors are of that stripe.

SECTION ON SURGERY.

Dr. WELLER VAN HOOK, chairman.

Dr. DENSLOW LEWIS of Chicago delivered the address of this section, selecting for his subject

SURGERY OF THE PUERPERIUM.

He gave a definition and statement of facts regarding the danger of infection in the puerperium, and alluded to the advisability and danger of examination of a puerperal woman. Postpartum hemorrhage is not always due to imperfect uterine retraction. If excessive or persistent, examination is imperative and surgical relief often indicated. Vaginal and perineal lacerations should be immediately closed, usually by sutures within the vagina. When infection occurs, the advisability of examination should be carefully considered. A uterine douche is usually sufficient when the details of labor are known. He gave a description of a normal puerperal convalescence, and dwelt upon the diagnosis of infection. Infection around the perineal stitches and of vaginal wounds should be treated by peroxid of hydrogen, as also infected wounds of the portio vaginalis.

Infection of the endometrium is putrid or septic. When infection extends beyond the endometrium, the phagocytic barrier may be disregarded, for it has failed in its object. The possibility of embolism and metastatic abscess formation should be remembered, but the source of infection is still within the uterus, and the chief endeavor of the obstetrician is its removal. Pus should be evacuated. It should be looked for in the vaginal fornix, and often the vagina should be cut. The abscess should be opened at the point most convenient. Ectoperitonitis should be treated as other extraperitoneal abscesses. Circumscribed collections of pus within the peritoneal cavity should be treated as extraperitoneal abscesses. Care should be taken not to break down adhesions. Suppuration within the peritoneal cavity should be treated by abdominal incision even if not extraperitoneal. Sometimes vaginal, other times Mikulicz, drainage should be resorted to. Dr. Lewis then spoke of the relative indications in peritonitis. He said that any interference with regular bowel movement was often an indication for section. Excessive tympanites is not of itself an indication.

With reference to hysterectomy, he considers it especially dangerous in the puerperium. It is not to be undertaken for retained placenta, and rarely for infection or thrombophlebitis. It is often inadvisable when metastatic abscesses have occurred; it should always be done when suppuration circumscribes the uterus, and it is probable that the uterus is the seat of pus formation. This is imperative if the uterus is an obstacle to adequate drainage or the uterine tissue is disorganized. He favors the vaginal method if the abscesses around the uterus are operated by a vaginal cut. The technic is often necessarily inexact. The extraperitoneal method of Lawson Tait should be remembered as easy of execution and productive of good results in this class of cases.

PUERPERAL SURGERY.

Dr. BERTHA VAN HOOSEN of Chicago followed with this paper. She reported several cases of laceration of the perineum with complications, and said there is only one time when it is ever really convenient for a woman to have repairs done on account of puerperal injury, and that is during the puerperium. For the first three days after confinement it is not necessary and usually not possible to nurse the baby, and after the first three days there is almost no operation that could have been performed to disturb the patient sufficiently to prevent nursing the child. At no other time during the first nine months does the child require so little nourishment. The best time for a large percentage of gynecologic operations, especially for repairing puerperal injuries, is during the puerperium, because it is nature's elective time. Because some seeds will mature when planted in late summer is not an argument that springtime is not the time to plant seeds. All great discoveries and progress in medical science have been in imitation of nature's methods of work. When nature is repairing is the time to repair. When nature is causing involution is the best time for physicians to get involution. If it is nature's time it is the best time, and if circumstances compel us to take other times, they are not necessarily better times.

MATERNAL IMPRESSIONS.

Dr. HENRY F. LEWIS of Chicago read a paper on this subject, saying: Maternal impressions are believed in by nearly all the laity and by a large majority of the profession in this country, if one may judge from reports of cases. He cited supposed cases from medical literature, and dwelt upon heredity and paternal impressions. All malformations should be explained. The time of impression seldom corresponds with the proper embryologic period. Similar impressions should produce similar malformations. Mental impressions can add nothing to the embryo, etc. The strongest blow is dealt to the theory of maternal impressions by the results of experiments in the production of monsters artificially. Innumerable experiments have been performed on the eggs of birds, fish, insect and echinoderm, which have resulted in the production of almost all the typic varieties of monsters, especially of single monsters. Different varieties can even be produced at the will of the experimenters by different ways of managing the eggs. Monstrosities can be artificially produced in the embryos of birds exactly like those which, occuring in human feti, are ascribed to mental shock or nervous impression of the mother. It has often been observed that fish eggs hatched in running water produce a far greater number of double embryos than do those hatched in still pools. The shaking caused by railroad or wagon journeys to the hatchery also results in a greater profusion of double monsters. In human feti, even at full term, there are sometimes found remains of amniotic bands and adhesions which obviously, by interfering with development of different parts at an early period of gestation, were the causes of various malformations. In short, all malformations and monstrosities can be explained by purely physical and mechanic causes, entirely remote from psychic influence, so that there is never any reason to invoke the mysterious or the supernatural to explain natural phenomena.

VESICULAR MOLE.

Dr. CARL E. BLACK of Jacksonville reported a case in a patient, 20 years of age, accompanied by degeneration and rupture of the uterine wall and great hemorrhage, necessitating the ligation of the left uterine artery. In this case the mass half filled an ordinary wash-bowl, and had the appearance of thousands of small white grapes piled up together.

OBSERVATIONS ON OPERATION OF SYMPHYSEOTOMY.

Dr. H. MCKENNAN of Paris contributed a paper with this caption. He drew the following deductions: 1. Symphyseotomy is not so formidable but that it may be performed by any physician of ordinary ability. 2. The patient must be free from sepsis and free from exhaustion. 3. The technic is immaterial so long as it is clean and expeditious. 4. The after treatment demands absolute immobility of the divided symphysis, and daily inspection and cleansing of the patient by the attending physician. 5. Expensive beds and apparatus are sometimes convenient, but are not necessary for the success of the operation. 6. The patient may be operated on in her own home, among her own surroundings and by her own physician.

ETIOLOGY OF ECLAMPSIA.

Dr. CHARLES B. REED of Chicago read a paper on this subject. Eclampsia is undoubtedly due to the circulation in the blood of a toxin or toxins as yet chemically unseparated, which have their origin in uterine metabolism. The occurrence of eclampsia is determined by the presence or absence of thyroid hyperplasia, as suggested by the interesting experiments by Lange of Königsberg.

MALIGNANT TUMORS OF THE EYE.

Dr. WILLIAM H. WILDER of Chicago read this paper, in which he pointed out the importance of recognizing such growths early. Neoplasms of the lids and conjunctivæ are usually easy of diagnosis and amenable to treatment. He discussed the nature of tumors originating in the lachrymal glands, the orbit or its walls and the adjacent bony cavities. Such growths may implicate the eyeball mechanically by pressure, or may involve the optic nerve and so cause blindness. Primary tumors of the cornea are, from the nature of this structure, exceedingly rare. Sarcoma and epithelioma may affect this part, the latter being the more frequent. They have their origin in the limbus. Tumors of the choroid, ciliary body and retina are most to be dreaded. Sarcoma of the ciliary body and choroid is a disease of middle and late life. Glioma of the retina is a disease of early life. Early diagnosis and treatment of both these are important. The prognosis is much more grave when the growth has caused increased tension of the eyeball.

*(To be continued.)*

## Kentucky State Medical Society.*

*Forty fourth Annual Meeting.*

FIRST DAY, MAY 16, 1899.

Dr. DAVID BARROW of Lexington, president, occupied the chair.

Dr. U. V. WILLIAMS of Frankfort, the oldest member of the society present at its organization, made a gift of a gavel to the president, manufactured from a log which was used as a part of the first waterworks in Frankfort.

Dr. STEELE BAILEY of Stanford, permanent secretary, made his annual report. Six members have been reported dead during the past year. There are at present 445 members on the roll. A feature referred to in the report was the fact that various organizations, district and county, have no representation in the AMERICAN MEDICAL ASSOCIATION, as they are not a part of the State society. He suggested a change in the organic law which will permit of their recognition.

CEREBROSPINAL MENINGITIS.

Dr. JAS. H. LETCHER of Henderson read a paper with this title. He defined the disease as an infectious one, characterized by inflammation of the brain and spinal cord. Only a few symptoms were seen in the fulminant cases which died early. It is unknown how the contagion is taken; the author does not consider it contagious. In the fulminant variety no pathologic changes are found, and in those of long duration there is suppuration of the brain, cord, base and post aspect of cord most so; engorgement of the lungs and inflammation is the most common complication. Diagnosis is to be made from typhoid fever, la grippe, tubercular meningitis and smallpox in the first few days. Lumbar punctures, under strict antiseptic precautions are good means of diagnosis.

Dr. D. O. HANDCOCK of Henderson reported an epidemic of this disease in Henderson County. One hundred cases were observed in January, February, March and April. Many cases occurred in the best homes and surroundings, most, however, in crowded surroundings, no cases except in localities near large or small streams or poorly drained places. No doctor, attendant nor nurse had meningitis, and there were only a few instances of several cases in the same family, with no evidence of transmission from one person to another, or one locality to another. In some cases there was resolution and recovery, and there may be two or three extensions. Out of the 107 cases 53 were male, 54 female; under 10 years of age there were 28; between 10 and 20, 14; between 20 and 40, 48; over 40, 7; 30 persons lived; death occurred before the tenth day in 28 per cent., after the fortieth day in 5 per cent. Many cases were not reported because of the mildness of the attack. Few cases of illness were prolonged 60 and 80 or 100 days. The prolonged cases have either died or are still sick; few recovered after the twenty fifth or fortieth day.

ETIOLOGY, FORMS, DIAGNOSIS, PROGNOSIS AND TREATMENT OF MENINGITIS.

Dr. T. D. WILLIAMS of Bardstown read a paper on this subject. He considers it slightly, if at all contagious, and endorses the micrococcus lanceolatus as the cause. For pain hypodermatic administration of opium is the best; ergot and belladonna to lessen cerebro-congestion; in children, bromids; for threatened convulsions, chloral opiates advocated in young subjects; purgatives, calomel and colycynth; enemas, iodid of potash, bichlorid of mercury; stimulants for heart exhaustion. More are saved by the stimulant plan of treatment; cold locally is grateful and beneficial. Blisters in sthenic type are good only when used early. One case was reported, a feature being the voiding of a large quantity of bloody urine just before death.

Dr. J. D. MADDOX of Rockport reported his experience with a case treated by antistreptococcic serum. The patient was a white male, 45 years old, of good personal history, seen in March, with initial temperature of 100, pulse 90; diagnosis made of cerebrospinal meningitis on the second day. Six doses of the antistreptococcic serum were administered, with very decided beneficial action after the third dose. Patient, however, five days from the onset, died, there having occurred opisthotonos, coffee ground vomit and temperature of 106.

Dr. L. C. ROYSTER of Smith's Mills reported a case of cerebrospinal meningitis in a twin, 10 years old, German parentage, seen in February, and the diagnosis made on the second day; convulsions established at the end of the first week, morphin being the principal treatment. There was very great improvement for a few days, but relapse on the thirteenth day, the train of symptoms being different in this attack. On the fifty-second day, the patient had grown very weak; in the meantime there was a pulse of 130 to 160. Strychnin was begun at this time, with decided improvement. On the sixty-fourth day the patient was taking nourishment, could turn over and had good use of his faculties. On the sixty-fifth day there occurred convulsions, coma and death.

Dr. J. B. MARVIN of Louisville considers the subject one we know little about. He hopes never to meet another case. If the diplococcus intracellularis is the cause, how does it find entrance into the cerebral and spinal membranes? Recent cases of cerebrospinal meningitis he has noticed generally follow in the wake of influenza, and he has thought that the point of entrance of this pathogenic germ is through the nasal passages. There is a difference of severity in different cases. We stand dumbfounded and hopeless in cases of severity, which die inside of nine hours, and have no way of knowing what it is except by inference, even if there is an autopsy. The majority of cases lately have been mild, mortality not large. Diagnosis is often puzzling; it is commonly diagnosed as la grippe, the first cases in Louisville being of this character.

Dr. J. A. LEWIS of Georgetown says that as a rule we can diagnose cases at once, but what can we do? He confesses that the feeling is one of helplessness. We must pitch our tent in front of the frightful malady, and not strike until we find a remedy. Any disease which has from 50 to 70 per cent. mortality strikes terror in the community. In the treatment, opium, blisters, bromids, perhaps do some good, but he doubts it. If there is inflammation of the cerebrum, there is suppuration in the citadel of the brain, and the bony canal of the cord, yet we treat the disease at arm's length. He had been looking for some one to suggest drainage, treat as a suppuration in surgical cases. He suggested drawing off of the blood to one point and introducing saline solution to take the place.

Dr. ARCH DIXON of Henderson believes the diagnosis is simple; if we once see a case we will know others when they are met. In the malignant fulminant cases there is no cure; morphia relieves pain. He saw the first case occurring in Henderson, later, six others; three died in from 36 to 45 hours; the first died in 48 hours; the second, a young lady school teacher, who was comatose in three hours, in six hours blind, and in sixteen dead; typic spots in both. The third case, a child, had convulsions, blindness, opisthotonos, and before night was dead. The other cases were 15, 12, 8, and 3 years of age, all recovering. Treatment of these cases were hot baths, inunctions of Credé ointment, morphia, all recovering. Two of them were malignant cases, unconscious for twenty-four hours, one is paralyzed now, can barely walk at the end of twelve weeks. A child 3 years old, sick eight weeks, recovered entirely, and no remains of the trouble. The Doctor does not believe it is contagious in any respect, any more so than is malaria.

Dr. WM. BAILEY of Louisville says no disease is to be more dreaded; in no disease is the doctor more helpless than in this. Etiology: The consensus of opinion is that the germ discovered by and described by Weichselbaum is the specific germ responsible; most ready method of the germ to reach the membrane of the brain is through the nasal or air passages. He is not willing to be quoted that the disease is due to a specific germ; is a contagious disease. If a specific disease due to a specific germ, it is due to another in some way. Fortunately the difficulty of the germ getting out of the nasal cavity is the safety of the community.

Dr. J. O. JENKINS of Newport has often met this disease, and when he recognizes it he feels the patient must die. There is no set remedy. Streptococcic serum is hailed with delight; anticipations have not been proven. Opium is the closest ap-

*Abstract of proceedings.

proach to a sheet-anchor we have found. In five cases reported, 80 per cent. were cured by Credé ointment. The speaker had tried it on one case lately, which died the next day, after one rubbing. The symptom mentioned as being recently reported is that obtained by setting the patient on the bedside, and endeavoring to elevate the heel, to bring the leg in a straight line; impossible to accomplish in this disease. It is not missed in 5 per cent of cases; not present in healthy adults.

Dr. A. SARGENT of Hopkinsville emphatically stated that it was not a contagious disease, does not travel along the lines of communication, is not found in the centers of population, and it can not be logically claimed that it is contagious or communicable. He advises symptomatic treatment: antipyretics, the best is quinin; heart failure, stimulants; pain, opium; emesis, blisters to epigastrium, blisters to the spine, and blood-letting in sthenic cases, calomel in continued doses if there is time.

Dr. CHERRY of Morgantown mentioned twenty cases in which no two had like symptoms. In some there was a chill as the initial symptom, others toothache, pains in legs or back. Morphia is the best treatment, not in one-fourth grain doses, but two grains every two or three hours; cold to head and spine, and heat to rest of body. He has used Credé ointment and found no virtue in it.

J. G. SHARPE of Jeffersonville, Ind., by invitation, stated that in the Indiana Reformatory there were 950 men quartered in a cell house built for 600; a most favorable condition for the spreading of the disease. He had one case which died in two days; two orderlies in care of this patient consulted him for pain in the head four days after death of patient. Calomel and saline were given to both, with acetanilid, bicarbonate of soda and caffein, both recovering. Twenty patients a day for three weeks were reported after the death of the case mentioned. No other deaths occurred.

Dr. J. G. BROOKS of Paducah believes the disease is easy of diagnosis, that there is success in hypodermatic administration of bichlorid of mercury, and mercurialization is what is needed. It may be given in triturates, repeated for that effect, or by hypodermatic method. Hyoscyamin is recommended as giving good results. In his city, 50 per cent. recovered.

Dr. LEON L. SOLOMON of Louisville took issue with a previous speaker concerning the therapeutic value of antistreptococcic serum in this disease. He referred to the antagonism of disease and antitoxin; antitoxin is used on a different principle to the streptococcic serum, in cerebrospinal meningitis. In the one we have a remedy which makes the soil unfertile, in the other material for a remedy which is antagonistic to the poison. Antitoxin in any specific disease acts by making the soil unfit, antidotal to the germ, or antidotal to the toxin. In streptococcic serum the idea is different. Its antagonism is like that in malignant growths. When the erysipelas streptococcic serum is used, we believe the cause of the growth is different from the cause of erysipelas.

GALL-STONES.

Dr. R. C. FALCONER of Lexington presented this paper. In the history he mentioned the first observation having been made in 1565; gastro-duodenal catarrh, alcohol, bacteria were mentioned as causes, ameba coli being the chief organism. In ten cases reported, six were in males, the ages varying from 26 to 70, average 39; in four the weight was two hundred pounds, more than six feet in height. It is common to the large and fleshy. As diagnostic signs he gave: pain, calculi in stools, absence of bile, paroxysm of pain in the epigastric region to the right hypochondrium and lumbar region, tenderness over gall-bladder; not easy on account of rigidity of muscles to detect distension of bladder, entire abdomen may be tender and tympanitic. When chilliness and rigors occur the case should be considered most serious. Colic has no place in the nomenclature of this disease. There is only one kind of colic, and that intestinal. Urine may show bile; must use nitric-acid test. Heart may become exhausted, and tricuspid insufficiency be produced. In one case in Lexington 135 stones were found. The prognosis is favorable, the diagnosis to be made from abscess of liver, malignant disease of liver and of pancreas. Treatment: morphia, atropia and chloroform; atropia relaxes ducts; counterirritation; cholagogues, salines and olive oil. Surgical treatment is recommended in repeated attacks of colic, suppuration of gall-bladder, recurrent attacks of peritonitis, impaction of stone in duct.

CHARLATANISM.

Dr. AP MORGAN VANCE of Louisville read this paper, in which reference was made to the testimonials of cures by quack nostrums, given by distinguished men. The expensive advertisements of those remedies testify to the fact that they must be remunerative of themselves. The lay and religious press is indifferent and entirely mercenary. These concerns should be prosecuted for obtaining money under false pretenses. Osteopathy was referred to as the greatest quackery of the age, more suffering and deaths being caused by osteopaths than by any other quacks. It is beyond comprehension that people will submit to the treatment. A minister's child with hip disease, in which there was an abscess with partial ankylosis, was referred to. The case, which was progressing nicely, mobilized by splint, was taken to the headquarters of the osteopaths at Kirksville, Mo., where they "found a dislocated spine and hip, both of which were reduced," and the child is now helpless, deformed, unable to walk, and barely able to get about on crutches. The minister, the father of the boy, recommended this treatment from his pulpit most strongly. Why do people allow this? Where is their common sense? Medical men should take the editors in hand and educate them, especially religious editors, and until they are taught there can be no hope for the masses.

*(To be continued.)*

## Physicians' Club of Chicago.

*Regular Meeting held March 27, 1899.*

Dr. E. J. DOERING occupied the chair and announced the subject for discussion as "Hospital Ethics."

RELATION OF THE HOSPITAL STAFF AND INTERNES.

Dr CASEY A. WOOD—Probably the fact that the average interne knows less of ophthalmology and otology than he does of other departments of medicine may serve to modify somewhat his relations with the attending ophthalmic surgeon under whom he works. It may, indeed, temper that magnified opinion of himself which every genuine interne is expected to exhibit. I am not prepared to deny that in many instances the extreme value that the interne attaches to his hospital services and the importance with which he expects others to regard these services are not justified in the premises. It is not to be forgotten that in the great majority of hospitals the house physician and the house surgeon obtain their places as a result of a keenly contested examination, or are given them as a reward for several years of faithful attendance in the lecture-room, in clinics and in the laboratory service. These men constitute the pick of the graduating class and they usually grow up to be the pride of our profession. For this reason, particularly, I have always held them in especial respect and have never seen any reason why the relations, social and professional, between the members of the hospital staff—I refer particularly to its attending members—and the house physician and surgeon should in anywise differ from the relations that commonly exist between discerning members of the profession engaged in everyday work outside hospital walls. The same friendly co-operation, the same feelings of fraternal interest, the same regard for the opinions and prejudices of a *confrère* should distinguish their intercourse with one another. It has been my privilege to take note of these things, and I have found that where such a policy has been pursued by the attending physician or surgeon, the service of both interne and attendant is more harmonious, more pleasant, more productive of desirable results, and in every sense more equitably carried on than when pursued under other conditions. Our college courses do not, unfortunately, often include a study of medical ethics, and I would suggest to those of you who hold hospital appointments that we have an unusually profitable opportunity, both by example and precept, to furnish practical lessons on this somewhat neglected subject. As we proceed on our daily rounds, we should be particularly careful that our conduct toward those medical gentlemen, who are temporarily acting as our assistants in the hospital service, is above reproach. They should be treated with every consideration that we might be expected to show them when we meet them afterward in practice. We should give them to understand that we also expect them to exhibit similar consideration toward their fellow internes and toward other workers in the hospital service. When differences arise, these should be settled by reference to the "Code of Ethics" that was as well understood in the days of Hippocrates and Galen as it is now. It ought to be understood that every member of the profession—be he interne or senior member of the staff—is bound by these Golden Rules of Medicine, and that no one of them can persist in ignoring them without incurring the just condemnation of every right-thinking worker in the Vineyard of Healing.

RELATIONS OF THE MEMBERS OF THE HOSPITAL STAFF TO EACH OTHER.

Dr. HENRY J. BURWASH—To consider this topic with any degree of fullness necessarily requires me to trespass somewhat on the topics assigned to some of the other gentlemen who

have preceded me and others who follow me. To say that the most cordial feelings of interest in and regard for each other should prevail among members of the same staff seems like so obvious and insipid a truism that one could almost blush to repeat it. The reasons why this cordial feeling should prevail and be manifest are very numerous. Among them are the following:

1. In this way only can the greatest good be done to those whom it is our duty, our hope and ambition to relieve, the special wards of the institution, the patients undergoing treatment.

2. Public confidence and respect for the institution and the staff are inspired thereby, and thus its cordial support is gained and the efficiency and effectiveness of the institution increased.

3. The respect and confidence of the patient's friends are thereby gained and held, and he is benefited and helped by their cheerful and hopeful assurances.

4. Better work can be done by the physician himself. Any man can do better work among cheerful and pleasant surroundings than he can if surrounded by adverse critics, by venomous enemies, or by traitorous spies.

5. We thus contribute to the comfort, convenience, pleasure and advantage of each other.

6. Perhaps the last consideration is that adverse criticism of our brethren, especially if unreasonable or false, or merely an attempt to obstruct their success and injure them, reacts against ourselves. People become suspicious of one who seeks to rise by drawing others down, or who attempts to promote selfish aims at the expense of other men's reputations; he becomes somewhat in the position of the man who pulls down a house on his own head. The relations of members of the staff to each other should be those relations which tend most to promote the purposes for which hospitals were founded.

It would generally be considered by a layman that hospitals are instituted to assist in relieving the sufferings of the sick, the maimed and wounded who may be brought to them for treatment. But not only those who receive treatment inside the institution are benefited. By reason of the researches made and the experience gained in the hospital, the stock of medical knowledge is increased, and attending physicians, the students who attend the clinics, and others who make themselves conversant with modern methods and ideas are enabled to do better work, and so the good effect of the hospital is felt throughout the entire community, so that the whole public are personally interested in the best results obtainable from hospital practice and experience.

The hospital is the great educator in medicine. It is not the general understanding of the public that hospitals are designed for the relief of personal enmity, or an outlet for spite, revenge, intrigue, or dishonesty afflicting the members of its staff. Hospitals are not endowed by private fortune or subscription, nor supported by large grants from the public coffers with a view that some unfortunate physician who may be appointed to its staff may relieve himself of personal animosities, nor as an outlet for envy, hatred, malice, revenge, or contemptible meanness. But though hospitals are founded, established and maintained for the benefit of the patients treated there and indirectly for the benefit of the public at large, and not for the immediate relief of the staff, this does not preclude the staff from deriving benefit from its hospital connections.

The chief benefits to the staff are: The advantages of a more varied experience than private practice affords for the study of the profession, an opportunity to keep in touch with and in the atmosphere of the most advanced and modern methods and ideas. These would seem to be the only real advantages, and should be the only ones impelling anyone to seek appointment. It is said, however, that a mere personal and mercenary one actuates some gentlemen. That the staff does derive some benefit from its connection with the hospital is proven by the eagerness with which appointments to these institutions are sought by members of the profession. In fact, so great is this eagerness and so diversified the means employed to secure appointments to one notable institution, that the press of the city made something of a scandal out of it and thereby tended to injure the whole profession before the public and diminish its usefulness. But, gentlemen, let me inquire why the eagerness? Why this anxiety? Why this mad scramble? Why this fair and even unfair competition? Why did some of the competitors go to members high in the appointing body and make charges against other men whom they scarcely knew? Was the motive of these members of the profession one purely humanitarian and philanthropic? To you, gentlemen, I shall not attempt to answer these questions. I claim no philosophic discoveries in this respect; I shall not trouble you with fine theories. Our profession is essentially one which combines both theory and practice and demands both inductive and deductive methods of study. The progress of the science in our day demands of the physician arduous and incessant study. So well is this necessity for constant and lifelong study recognized by the profession, that there have grown up a number of post-graduate schools where practitioners from the country generally go at times, at great expense and inconvenience to themselves, to see and learn the most modern methods. In no other way can the practitioner follow these changes, and so closely follow them as on a staff of some hospital. There his range of cases must vary some at least from that of his private practice. But while improved methods keep changing, yet in many cases what one man finds satisfactory in his practice, another refuses to use—perhaps because he has not found good results from it, or perhaps because better results have followed something else in his experience. So it is that there is never absolute uniformity in methods of treatment. But few diseases yield universally to specific remedies.

As human beings, we all make mistakes sometimes, there is no escape from it. But if one reputable physician honestly preparing for his work treats a case in a particular way, can any other brother, especially one who has not seen the subject, honestly say that he has made a mistake, or that he was negligent? In the light of my experience and judgment, I shall most emphatically say that he can not. Who can decide? Where must the decision finally rest? My answer to that question would be that the final arbiter must be the conscience of the physician who acted, judging by the conditions that presented themselves, the treatment and the final outcome. The public at large are always too willing to charge members of our profession with empiricism, ignorance and carelessness, and are too willing to grasp at any story which tends to throw suspicion on a physician. How careful, then, should physicians themselves be that their own words or actions should not tend to encourage any malicious scandals involving the good name of a brother physician.

### WHAT SHALL BE OUR ATTITUDE TOWARD PROFESSIONAL MISTAKES?

Dr. J. E. STUBBS—There are none so great that they do not or can not make mistakes. I recollect, many years ago, that a noted gynecologist operated with the idea of removing a fibroid tumor of the uterus, and instead took out a six-months child, so that errors do not always occur among the young practitioners, or among the ignorant of our profession. There is no surgeon living to-day but is likely to make a mistake. He may think he is right, but the facts may afterward prove that he was wrong. There is no practitioner engaged in the general practice of medicine but makes errors every month of his life. He is not perfect. I fail to note in history that Dr. Luke, who traveled with Christ, was perfect. On the contrary, he was liable to make mistakes. I presume he occasionally called a case one of paresis when it was only a case of hysteria, and probably gave a dose of nightshade when he should have given catnip. The individual has never existed who does not commit errors. I do not want to see the man who never makes a mistake. When such a man reaches the point in his life that he does not commit errors, he is fit for the kingdom to come, and the sooner he is translated the better. My fellow practitioner here to the left of me, whose hair is gray, has made his mistakes. He has grown gray with carrying the burdens and the sufferings and ills of unfortunate human beings. He does not look like a "mistaker"; but I have no doubt that he has made at least one mistake just in order not to be perfect. But, should we go on and publish these mistakes, or should we cover them up? If we publish them, who is benefited? Is there any one who is made any better by it? Are any of us made any better by so doing? No. By publishing such mistakes we incur the hatred and ill-will of our brother practitioners. The man who will try to pull down or destroy the practice of his fellow practitioner in an attempt to build up his own, should be put behind the bars; he should not be allowed to run at large. If we build up a reputation by climbing upon the shoulders of another practitioner and saying that he has made mistakes, and we glory in it ourselves, what will the people think about it? If I discover that my brother practitioner has made a mistake and publish it at large, do I help him or myself? Not at all. I warn all of you not to uncover the mistakes of a fellow practitioner, because if you do, it will come back like a boomerang, and it will sting to the bitter end. The average hospital covers up a multitude of mistakes. We gain a large amount of our experience in hospitals, and it is by noticing the errors or mistakes in diagnosis that we obtain knowledge. But the interne should not tell about the mistakes that are committed; he should not go about backbiting and saying this physician or surgeon made such-and-

such a mistake in diagnosis or in an operation. We do wrong when we do not try to cover up the mistakes of our brethren. There are many cases that require extreme surgical dexterity and a large amount of knowledge in order to operate successfully; yet those who are operating all the time make mistakes. We have to do a great many things empirically, and if we tell people that we do not understand why this or that physician has made a great blunder, it hurts him; it hurts the community, because the opinion of the physician in society is considered authority, and particularly in the community in which he lives, among his associates and friends. They consult him as they do no other man; they consult him more confidentially and give up their secrets to him more unreservedly than they do to their priest or minister.

DUTY OF HOSPITAL PHYSICIANS TO OUTSIDE COLLEAGUES.

Dr. WELLER VAN HOOK—The hospital surgeon or physician occupies a peculiar position. He does not come into contact with the patient until he meets him in ward or private room and in cases of emergency at the operating table. All financial and preliminary ethic questions are left by the medical staff to be inquired into and usually settled by the administration, represented frequently by a broken-down politician, an inexperienced woman, a trained nurse, a young clerk or an unsuccessful or superannuated clergyman. Sheltered by this arrangement, which as a rule effectually intervenes between him and his outside brother, the hospital staff member often goes on with his scientific work serenely and unconcernedly.

Is it necessary that hospital physicians indiscriminately give professional attention to all who are sent to their wards? To do so is to do many an injustice to outsiders.

It seems a melancholy truth that hospital staffs as organized bodies take but little interest in the admission of patients. I know of no hospital in Chicago receiving both pay and charity patients in which the staff has made regulations governing the admission of patients, the decision whether a fee shall be paid or not and establishing clearly the distinction between paying and charity patients. Yet the physician is expected to give much time and personal attention to non-paying patients, to risk his professional reputation and often to expose himself to infection in their service. Who is better entitled than he to have representation in the tribunal which decides the important question of the patient's status and of the compensation to be made. The hospital physician or surgeon owes it as a duty to himself and to his outside brethren to attend to this question with care and diligence. I venture there are few of you who have not at some time or other made arrangements with patients for professional treatment with the payment of fees only to have the person enter a hospital as a non-paying patient in the care of some one else.

Medical men seem to feel that such questions belong to the administration exclusively and suffer injustice to be done to themselves and their outside brethren rather than make the necessary disturbance to secure their rights. This is one of the most conspicuous abuses of medical charities, and could be avoided by proper agitation and co operation by medical men.

In one instance a medical man whose name you would recognize if mentioned, drew the line at patients occupying private rooms, refusing to operate upon or even to examine patients able to occupy such rooms, except in emergencies, without some arrangement regarding fees. The people were not subjected to extortion, but were allowed practically to settle the fee for themselves. The hospital authorities at once saw the reasonableness of the course and nothing was said by them in opposition.

It is my opinion that people who are poor should be required to pay what they can afford, in order to avoid pauperization.

Shall the hospital physician accept patients for treatment without inquiry as to their previous relations with the profession? If it is proper for the individual practitioner to inquire who had been the previous attendant and whether he is still in attendance, why is it not proper for the hospital physician to do so? This question is usually decided by accepting the patient without inquiry as to antecedents. But I feel sure that custom in this case violates the higher dictates of the professional conscience. If Dr. A. recommends a patient with appendicitis to have an operation and the patient's friends arrange for him to go to a hospital, it should be the recognized duty of Dr. B., the hospital surgeon, to communicate with and consult Dr. A. before taking summary charge of the case.

The outside physician, on the other hand, unfortunately too often blames the staff members for giving attention to his former patients when the hospital physician is entirely ignorant of the former professional relations of the patient or is innocent of evil intent. Mutual forbearance is essential.

*(To be continued.)*

## Chicago Medical Society.

*Regular Meeting, May 3, 1899.*

The program consisted of a symposium on "Hip-joint Disease."

PATHOLOGY OF HIP-JOINT DISEASE.

Dr. FRANK X. WALLS read a paper on this phase of the subject. The etiologic factors that determine the localization of bacilli in the hip-joint are by no means as precise as desirable. The predisposing factors usually considered are age, sex, trauma, heredity, exanthemata and hygienic surroundings. Hip disease occurs most frequently between 2 and 10 years of age. Of 2000 cases collected from standard text-books, three-quarters were in those under 10 years of age. Possible elucidation of the age incidence is the vascularity, fragility and liability to trauma of the hip joint during early life. Boys are afflicted more often than girls, though the preponderance is inconsiderable. There is history of trauma in a large number of hip cases; Koenig says 50 per cent., Gibney, 42 per cent. Animal experimentation would seem to show conclusively that a slight injury can unquestionably determine the articular localization of tubercle bacilli. In the human it is believed that the trauma causes such an injury as impairs the physiologic activity of the joint, and at this unfortunate time tubercle bacilli that happen to be circulating in the blood become arrested, localized, and find in the traumatic effusion pabulum for their growth. Injuries are, as a rule, not severe; more usually a strain or sprain than a severe crushing or fracture. The primary focus is perhaps more often a bronchial lymph-gland, although a pulmonary or other visceral tuberculosis might equally well furnish the necessary bacilli. Unhygienic surroundings, insufficient or unwholesome food and impure air are as potent causal factors in tuberculosis of the joints as in tuberculosis elsewhere. The exanthemata, notably measles, scarlet fever, diphtheria, and also whooping-cough, are followed so closely at times by hip disease that their relation seems intimate. A trifle over 5 per cent. of hip disease is thus related to the infectious disorders.

Reidel considers 84 per cent. of the cases of hip disease as primarily osteal. Muller examined 61 cases and found 47 osteopathic, 3 arthropathic, and 11 doubtful. Volkmann believes the disease to be almost invariably of osseous origin in childhood, while in adults the synovial form predominates. Wright, from examination of 100 cases of excision, believed the acetabulum to be primarily involved in 10. The osseous focus may be very minute, and the tubercular process early extends to the synovia, where the tubercular tissue may luxuriantly proliferate, and it is only after very careful examination of the bones that a primary osseous focus can be excluded. The trend of modern opinion is toward a belief in the almost universal occurrence of a primary osteal focus, with involvement of the synovia only secondary to previous bone disease. Nichols, who has examined 120 specimens, from early excision, is of this opinion, and believes that the earlier and more carefully the joints are examined, the greater becomes this conviction.

The essayist pointed out at length how pathologic changes occur in the femur.

DIAGNOSIS OF HIP-JOINT DISEASE.

Dr. F. S. COOLIDGE read a paper on this subject, and gave the details of each symptom in the diagnosis of this disease, and then drew a picture of a typic case to serve as a guide in the study of obscure cases. He set down the main points in the history, the symptoms and signs, and pointed out their relative importance. Among them were these: A family history of tuberculosis; a previous trauma; a gradual onset, often with remissions; limp, pain, atrophy, limitation of motion in the joint, increasing to rigidity; muscular spasm; malposition; flattening of the buttocks, elevation of temperature; night cries and night sweats; bone destruction, shown by true shortening of the limb, and abscesses.

In advanced cases, in which all the symptoms are present, the diagnosis is easy, but in the earliest stages it depends entirely on the accurate detection of the signs in their minutest degree and on the proper estimation of their value.

The use of the skiagraph in diagnosis of early hip-joint disease is not very satisfactory. When the lesion is slight, and the osteal focus is in the solid bone, there is no trace to be made out in the photograph, which is sufficiently clear to declare its nature definitely. When the joint is involved slightly, and the osteal focus is very small, nothing can be detected in the hip-joint which can reveal its nature. But the radiograph is of great importance in settling a question of doubt in the later stage. This is especially true of suspected hysteric hip-joint and of malignant tumors of the joint, of coxa vara, and of dislocation. It may be that with improvement of technic sur-

geons can eventually learn to appreciate the early osteal foci which are present before serious damage is done.

MECHANIC TREATMENT OF HIP JOINT DISEASE.

Dr. JOHN RIDLON, in his paper, stated that the treatment of hip disease is practically a purely mechanic problem; that operative treatment is not demanded by more than 1 per cent. of cases that are subjected to even moderately effective mechanic treatment. He is of the opinion that operative treatment should be resorted to only as a life-saving measure, because the best results of operative treatment are inferior to the poorest results of mechanic treatment.

A consideration of some of the symptoms is necessary for an intelligent understanding of the theories of the mechanic treatment. At the onset of the disease the thigh becomes flexed, abducted, and rotated outward into the position which one naturally assumes when the weight is thrown on the other leg. As the disease advances and the joint becomes more sensitive, the thigh becomes more flexed, and from abduction and outward rotation passes to adduction and inward rotation into the position which one assumes when protecting the limb from injury. Involuntary muscular spasm carries the limb into the position of deformity and retains it there until structural shortening of all of the soft parts effectively immobilizes the joint; then recovery takes place, but with the limb in the position of deformity. During all this period of progress from slight restriction of motion to complete false ankylosis, the only tendency of movement is toward flexion, with abduction or adduction, never toward extension or hyperextension. If then, the possible motion in the direction of flexion and adduction or abduction be restrained by artificial means, the joint is thereby effectually immobilized. It is the function of a normal joint to permit of motion and bear weight. In disease nature effects a cure by relieving the joint of these functions more or less effectively for a time. The involuntary muscular spasm and structural shortening of the soft parts abolish motion, and the position of deformity relieves the joint of bearing weight to a very great extent. By mechanic measures physicians imitate nature, and aim to more effectively immobilize the joint and relieve it from weight-bearing, and, at the same time, to do this with the joint free from deformity. Immobilization is had by a retentive splint of some form, and protection from weight-bearing is had by axillary or ischiatic crutches or by recumbency in bed.

The simplest form of treatment is the plaster-of-Paris splint and recumbency. If plaster of Paris be used, it should extend from the ankle to the axilla, and it should be applied only when the deformity has been as fully corrected as possible. Absolute recumbency should be insisted on for so long as the joint shows sensitiveness to reasonable manipulation. Afterward the patient may be allowed up with axillary crutches and a high shoe on the other foot.

The simplest splint is known as the Thomas splint. This splint, of which he is a great advocate, was fully described by Dr. Ridlon. The splint most generally in use in America is the traction splint in some of its numerous forms and modifications. This appears to have originated with the late Dr. Henry G. Davis.

The question of traction is a somewhat vexed one; perhaps a fair statement would be something like this: A positive continuous traction force can be had by any of the traction splints up to about ten pounds when used during recumbency; but continuous traction is not possible by any of the traction splints when used as an ambulatory apparatus. Continuous traction is positively indicated in only a small percentage of cases; in a still smaller number traction adds to the pain and may fairly be considered as harmful. In the vast majority of cases it is neither indicated nor contraindicated, but proves a very useful addition to other means of immobilization. Intermittent traction, such as is had during locomotion, is positively harmful so long as the joint is exquisitely sensitive; later on it is difficult to demonstrate that it is of any special harm, while the use of the splint as a perineal crutch has many very positive advantages.

SURGICAL ASPECT OF HIP-JOINT TUBERCULOSIS.

Dr. L. L. MCARTHUR followed with this paper. His experience with hip-joint resections has, when compared with that of others, been small, probably between fifty and sixty cases. Every case of joint tuberculosis has its inception either in the bony structures of the joint or its synovial membrane. When beginning in the bone, it later breaks into the cavity to infect it.

To the general surgeon it would seem that surgical interference should be resorted to:

1. When the constitutional condition of the patient shows a progressive deterioration under treatment. This may mean: *a*, sepsis from the absorption of the products of a mixed infection in the sinuses, with more or less pronounced hectic; *b*, amyloid degeneration of the organs of the body; *c*, pulmonary tubercular invasion, and *d*, diarrhea either colliquative because of kidney degeneration or of tubercular enteritis.

2. The age of the patient should influence the surgeon's decision; reluctance to operate in very early youth and after 40 years of age is growing progressively greater—in youth, because the disturbance of future developmental centers becomes greater, therefore the end results worse; in later years, because experience has shown that adults stand joint resections of this type but poorly.

3. The environment of the patient should be a factor in determining operation, and however illogical it may be to make one rule for the rich and another for the poor, it is still practical and necessary to consider the fact that the child of a day laborer can not await the long, expensive trial of orthopedic measures to, in the end, not infrequently finally submit to a resection that may be occasionally justifiable in the child of the rich.

4. Since by means of the X-ray we are often able to locate the disease as to the exact portion and proportion of the joint affected, it is conceivable how, with a location favorable for removal, an unusually early operation might be justified, or, conversely, how in the absence of evident bone disease the case might be treated as a primary synovial tuberculosis.

The author protests against a routine treatment of this or any joint, first by mechanics, then by mechanics plus injections, and finally operation. Too frequently is the surgeon satisfied by a diagnosis of "tubercular hip," without regard to whether it be osteotuberculosis of one or both bony parts, primary synovial tuberculosis, or tuberculosis near the joint, but not in it; then contentedly proceeding to the application of mechanic appliances with or without iodoform injections, regardless of the probable location of the infective center. It is the opinion of the essayist that those cases which are cured by iodoform and its analogues, are those in which the disease has been primarily a synovial tuberculosis. As only a small proportion of the cases are of primary synovial origin, but a small number will be cured by injection treatment, injections, therefore, should be limited to those joints whose clinic history and X-ray examination conform more nearly to that of primary synovial tuberculosis.

5. It will be justifiable to operate when failure of relief of suffering follows appropriate conservative treatment.

In conclusion, the essayist emphasized the following facts relative to the technic of hip-joint resection:

1. Healing may occur in any stage of the disease.

2. Operations are justified in the old cases of ankylosis with poor functional capacity, but subtrochanteric section, with uniformly good results.

3. That hip disease no longer calls for a refined diagnosis.

4. That in greatly emaciated patients with metastases, operation is not necessarily contraindicated; judgment in the particular case should be used.

5. It is a rare thing nowadays to have a fatal septic arthritis follow resection—the former bugbear of the operation. The mortality has decreased from 60 to less than 3 per cent.

## Philadelphia County Medical Society.

*Meeting held May 10, 1899.*

PHENOMENA AND MECHANISM OF INHERITANCE.

Professor CONKLIN of the University of Pennsylvania, in treating this subject, said that by inheritance is meant the sum total of all qualities transmitted from the parent to the offspring. Inheritance is of two kinds: 1, receptive, when children are like parents; 2, when children are unlike parents, but inherit traits possessed by parents. For instance, we have a blending of characteristics not possessed by either parent, in the offspring of a white and black person, producing a color different from either. Peculiar family characteristics may be inherited, such as the development of three eyes in members of a family which Darwin saw and traced through five generations. Professor Conklin had been able to trace the occurrence of a peculiar dimple in the temporal region through three generations. We also have what is known as physiologic characteristics, as in longevity, tendency to baldness, production of twins or triplets. In this paper pathologic characteristics for the most part will be left out.

Teleologic characteristics are exemplified in monstrosities, polydactylism, in one extremity, syndactylism, deaf-mutes, etc. From one deaf-mute who lived in this country 200 years ago, one observer had been able to trace 500 lineal descendants. Characteristics may remain latent in the parent, to be subse-

quently developed by the offspring. In the latter we have an example in the lower animals, e.g., it is known that a good line of milch cows may come through a particular male. We also have an example of the transmission of latent characteristics in what is called atavism. In regard to the inheritance of acquired characteristics but little is known.

When we come to study the method of inheritance, we find that it all takes place when there is union of the egg cell or ovum, and the sperm cell. All characteristics are therefore transmitted through these cells. The subject of inheritance therefore becomes a cytologic one. The observations presented are the result of ten years' work in this special field. The processes of development in the egg are as follows: we have a cell which has been fertilized, with spindle shaped bodies breaking up into chromozones in the process of indirect cell division. There must be some significance in this indirect cell division, because nature would not take such difficult steps if it were not necessary. It is known that each species of animal has a definite number of chromozones, e.g., in the human species there are sixteen. A great increase in the number of chromozones, however, does not necessarily mean a high degree in the scale of animal life, since many molluscs have over 100 chromozones or chromospheres. Every cell of the body derives one-half of its coloring matter from the father and one-half from the mother; that is, one-half comes from the sperm cell (or spermatozoa) and one-half from the ovum. That these chromozonic bodies give rise to the transmitted characters has been proved by experiments on the lower animals. Thus, when the coloring matter from the eggs of a certain variety of one of the lower animals had been shaken out and separated, then fertilized by the sperm of another species, the offspring showed entirely different characters possessed by either parent. Characters which are transmitted in the egg cell are purely inherited ones, while those developed later are what might be termed acquired characters. Developments due to inherited characters depend on the ordinary environmental conditions, while acquired characters are developed from unusual conditions. Learning languages is an acquired character which may be inherited. Powerful muscular development may be inherited. In the lower animals this is exemplified in apes, in which there is muscular development in the hind legs. Inherited habit always goes hand in hand with inherited structure. Personally, the speaker did not wish to oppose the view of acquired characters.

In the case of flowers the following experiment had been carried out by an Austrian observer, showing the extent of acquired character depending on new and strange surroundings; from a land far removed, to Vienna, were brought many thousands of plants representing many genii, and all were placed in the new environment of that city. In one year all the plants acquired the character of the native ones which grew in the garden. At the end of thirteen years he returned them to their native soil and within one year the plants had regained their native character. To a certain extent acquired character must be transmitted.

Dr. ALLIS desired to have the phenomena of increased activity of the spermatozoa at the moment of fecundation explained.

Dr. CHARLES K. MILLS believed in the inheritance of acquired character.

Dr. E. FERREE WITMER did not believe enough stress had been paid by observers to acquired states. As an example, a professor at Cambridge had at the beginning of the college course measured the skulls of many students, and at the end of the course they were again measured and it was found that there was an increase in all the diameters, thus showing greater development from increased mental effort. He desired to know the significance of inherited tendency.

Dr. G. G. DAVIS asked whether the paper did not repudiate the theory of development of character from environment?

Dr. DAVID RIESMAN stated that the eminent pathologist, Ziegler, did not believe in the inheritance of acquired character. This subject he thought of interest in the study of tumors, as well as immunity.

Dr. A. A. ESHNER looked on the cell as possessing innumerable potentialities, but at the same time there must be untold resistances between one cell and another.

Dr. SOLOMON SOLIS-COHEN thought the greatest question from a medical point of view in the study of this subject was whether the character of an individual would develop under different environments.

Dr. HENRY BEATTIES thought the paper of Professor Conklin had been the means of demonstrating a principle or law that was universally applicable.

Professor CONKLIN repeated that the mixture of the sperm cell with that of the egg cell produces a resultant not like either, and yet similar to both parents. A character, to be acquired by inheritance, as meant by the definition cited, must make its influence felt in every portion of the cell. Acting alone on one part of the cell body it could hardly be transmitted. From this reason he considered deafness uninherited. Suppose we should say that in one portion of the cell is a certain granule distinct from the rest, then a cause acting alone on that granule would not affect the whole cell, and therefore would not be inherited. Things which influence the cell as a whole are alone inherited. The question of evolution would necessarily bring up many complications. All characters have in a measure been acquired, as is observed in adapting ourselves to unusual circumstances always for the purpose of utility. In the study of disease it has been proven, as for instance in tuberculosis, that germs of disease are not contained in the sperm cell or ovum, but if a tendency toward the disease is developed it does so during the growth of the embryo and in this way it may become infected. In reply to the question of Dr. Allis, he gave it as his opinion that certain chemic elements stimulated the activity of the sperm cell. In regard to the nature of the body after union of the spermatozoa and ovum, he expressed the opinion that it was asexual, and that the production of sex was determined during development of the embryo. In its earliest stages it was not hermaphroditic. In answer to the question of Dr. F. A. Packard, as to the explanation of transmission of hemophilia, a condition transmitted to males and not to females, Professor Conklin thought such was as an example of latent character not developed in the mother but transmitted to the offspring, with the exact reason for which we were not familiar.

## Denver and Arapahoe Medical Society.

*Regular Meeting, May 9, 1899.*

COMPLICATED CASES OF APPENDICITIS.

Dr. S. D. VAN METER reported two cases occurring in his practice.

*Case 1.*—A female, aged 35, came to Colorado several years ago for pulmonary tuberculosis. Two years ago she was fitted with a truss for right inguinal hernia; she could not, however, wear the truss on account of alleged pain. Being of a decidedly neurotic disposition the pain was ascribed to hysteria. Owing to lack of support the hernia would frequently protrude through the external ring, giving great pain and distress until reduced. Late one evening after the reduction of the hernia, the symptoms did not entirely abate, and shortly after midnight she developed general abdominal pain, diarrhea and violent expulsive vomiting. When seen the following morning there was marked tenderness on pressure over the region of the appendix, temperature normal, pulse 112; vomiting, less violent, continued. Owing to an exceptionally thin abdominal wall a tumor could be felt in the right iliac fossa, of a cylindric shape, size of the little finger. The diagnosis could be narrowed down to hernia reduced *en bloc* and acute appendicitis. Immediate operation was advised. On arrival at the hospital the pain and vomiting had almost ceased, but pulse kept steadily increasing. The appendix was found to be very much thickened, its lumen almost completely obliterated. The little space that remained was filled with pus, no concretion. Recovery was uninterrupted. Prior to the operation the patient suffered from numerous gastro intestinal symptoms which were thought to be those ordinarily seen in pulmonary tuberculosis. These, to a large degree, have disappeared, and he is confident that they were due to chronic intestinal trouble aggravated by the appendicitis.

*Case 2.*—A male, aged 36, was taken suddenly with general abdominal pain, diarrhea and vomiting. He ate lobster at supper of the previous day. Temperature was normal, pulse 90, with tenderness at McBurney's point. Diagnosis: appendicitis; advised operation if within a few hours the symptoms did not abate. Local application of heat and concentrated salts internally were ordered, and by evening he felt comparatively comfortable. Pulse, however, was 100, and rigidity of abdominal muscles marked. On the following morning the patient declared that he felt well and wanted to dress and go down town. His temperature was 99, pulse 110, local tenderness on pressure, no vomiting. Temperature soon rose to 100, pulse to 120; no change in local symptoms. He consented to be operated on. On opening the peritoneal cavity a small amount of sanious matter of bad odor escaped. The appendix did not have to be searched for, its point coming directly into the opening. It was curled upward and outward and buried in a bed of inflammatory exudate. After having carefully broken up the adhesions the appendix was found to be gangrenous at several points; cecum indurated. Attempt at temporary ligation of appendix near junction with cecum was made, but the ligature

severed the organ. The appendiceal artery was the cause of considerable hemorrhage, which had to be controlled for forty-eight hours with hemostat. The region was sponged with dry gauze, no irrigation. Cecal wound was brought to center of parietal incision and an attempt at making barrier between general peritoneal cavity made by gauze packing. The patient reacted well from the operation, but on the second day he developed acute arthritis of elbow-joint; temperature 103.2; articular symptoms in knees, ankles and right wrist; pulse 110. Septicemia was naturally feared, but having treated the patient several years before for articular rheumatism, it was concluded that both the temperature and arthritis were due to rheumatism. Salicylates were given per rectum. Temperature dropped to 97; pain under control.

Both cases demonstrated the now well-accepted fact that the pulse is far more reliable than the temperature as a guide in abdominal inflammation.

HYPERTROPHIC RHINITIS IN FEMALE PATIENTS AT PUBERTY AND THE ABUSE OF THE CAUTERY IN THE TREATMENT.

Dr. W. K. ROBINSON read a paper on this subject and said, in part, that there exists a physiologic as well as an anatomic relation between the nasal and sexual organs. This relation is partially explained by theory of reflex or correlative action, and partially by the bond of union which exists between the various erectile tissues of the body. It is a well-known fact that women with healthy nasal organs suffer from engorgement of the turbinated corpora cavernosa at each menstrual period, and clinic observations have demonstrated that all nasal affections are aggravated at that period. The ardent lover frequently complains of the blocking of his nasal passages. If this exaltation of the nasal membrane be carried beyond physiologic limits there comes a time, sooner or later, when that which was a normal process becomes a pathologic one. The following three cases illustrate the relation between hypertrophic rhinitis and the sexual organs at the period of puberty, in which failure to appreciate the influence of this relation has misled the physician into making use of the galvanocautery, with grave results.

*Case 1.*—Alice C., white, 18 years old, suffered from atrophy of the inferior and middle turbinated bones of both nostrils; occlusion of nares, especially in the morning, due to the accumulation of dried crusts. At 13 she began menstruating. During the period she suffered from fulness of the nostrils and mouth-breathing. At 15 a physician cauterized the mucous membrane, and great relief was experienced. Eighteen months ago the present symptoms developed.

*Case 2.*—Mary L., aged 17, had perforative septum and atrophy of the left middle and inferior turbinated bones. At 16 she suffered from turgescence of the left nostril and was cauterized. The cautery, by accident, touched the septum. The right nostril is normal.

*Case 3.*—Female, aged 17, was cauterized at the age of 15, which relieved her of what seemed to have been an annoying hypertrophic rhinitis, or extreme turgescence of the nasal mucous membrane. Atrophic condition, with its characteristic symptoms, began one year later.

The above described cases, and three others, have convinced Dr. Robinson that had no cautery been used the atrophic rhinitis would not have developed.

## Philadelphia Pediatric Society.

*Meeting, May 9, 1899.*

CONGENITAL HEART DISEASE.

Dr. J. P. CROZER GRIFFITH presented this case. On auscultation a loud murmur could be heard in the region of the pulmonary valve, leading one to believe it might be pulmonary stenosis, together with accentuation of the second pulmonic sound. The explanations offered for this peculiar murmur are that it might arise from a patulous condition of the ductus arteriosus, to the transposition of the large blood-vessels; or it might arise from a perforate septum ventriculorum. There seems to be no marked hypertrophy of the entire organ, but there is possibly some hypertrophy of right ventricle, though ill defined.

Dr. JAMES TYSON confirmed the diagnosis of pulmonary stenosis. He also pointed out that there was a recoil of the blood into the aorta, indicating a patulous condition of the ductus arteriosus.

Dr. A. A. ESHNER was under the impression that the condition might be one of mitral stenosis; to which Dr. Griffith replied that this condition was attended, as a rule, with marked hypertrophy.

CASE OF GENERAL VACCINIA.

Dr. JAMES TYSON presented a case and exhibited photographs showing the character of the eruption. The patient was 6 months old, and at the time of the last vaccination, two previous attempts had been unsuccessful. The unsuccessful ones had been made with ivory points, after which Dr. Tyson had used glycerinated vaccin-lymph. Three days after the inoculation of the left arm a pustule developed, and on the same arm there appeared, a few days later, probably thirty small pustules, while a similar number occurred on the right arm, some on the dorsal region and on the legs. Here then was a case of general vaccinia. Some restlessness occurred but there was no fever. The pustules remained for several months. The mother stated that she had known of a case in which there had been a profuse rash all over the body following a vaccination. It seemed to be established that vaccination with liquid lymph instead of the ivory points had its own sequelæ.

Dr. W. M. WELCH had never seen a case of a similar character. He did not think they were typic cases of vaccinia. He mentioned historic facts to prove that in the days of Jenner vaccin matter was frequently contaminated with virus of smallpox.

CONGENITAL STENOSIS OF PYLORUS.

Dr. D. L. EDSALL presented this case, the patient 9 months of age. Some time ago gastro-enteritis developed, lasting for a period of five days During this attack moderate fever had been present (101 degrees). Calomel had been administered and enteroclysis practiced, which relieved the bowel trouble and vomiting. The child has become progressively worse. In July of last year vomiting again came on, irrespective of the kind of food given. There seemed to be no distress when the stomach was empty. No tumor could be outlined in the region of the pylorus. Death occurred on August 9. A few days before death purpuric spots developed over the abdomen.

At the autopsy the mesenteric glands were found enlarged and thickened and the orifice almost closed. There was much overgrowth of the submucosa.

The question of congenital stenosis was one of much interest, and so far no conclusive explanation has been offered. It was supposed that stenosis might be a consequence of spasm of the stomach. In the case cited the speaker thought it was one resulting from atavism.

ERYSIPELAS IN CHILD.

Dr. L. M. ALLEN presented a case in a child 14 weeks old. On February 2 the mother had an incision made in the fore-arm, at which time pus was evacuated. A few days later her child fell from a piece of furniture to the floor, and shortly after a red spot developed on the back of the neck and subsequently spread over the entire body, first on the back, then on the legs, abdomen and scalp. Death occurred on the thirteenth day of the disease. Some days later another child of the same family developed scarlet fever. The question of etiology in these three cases was important. Whether or not they were coincidences he could not say.

Dr. RAVENAL spoke of a case operated several years ago for empyema, at the Presbyterian Hospital, and during the operation a small spicule of bone was thrown with considerable force against the cheek of the house surgeon, puncturing the skin. A few days afterward a well-marked case of erysipelas had developed, beginning in the wound. At the time of operation the fluid obtained from the pleural sac had been examined and showed a pure culture of streptococci.

CASE OF MELENA.

Dr. L. ALLEN presented a case of melena. The child was born last March and at the time of birth was of good color. The stump of the cord healed without difficulty, except a very slight hemorrhage on the second day. A few days after birth hematemesis occurred and also hemorrhage from the bowel. Irregular hemorrhages occurred until the tenth day, at which time jaundice occurred. Ice-bags had been applied, and gallic acid and ergot internally. The child was now in good condition. The speaker quoted from different writers relative to the etiology of the condition.

CASE OF NOMA.

Dr. EMERY MARVEL presented this case and exhibited photographs. The patient was 33 months of age, had been raised on condensed milk and was poorly nourished. On the fourth day from the first manifestation of the disease the gums and alveolar processes had begun to be destroyed. Creolin had been used as an antiseptic wash and deodorizer, but without avail.

Dr. W. McC. HAMILL spoke of certain cases of noma that had occurred in West Philadelphia, and on culture-media the discharge was found to contain micro-organisms similar in character to Klebs-Löffler bacilli. He inquired whether a similar experience had been noted in the case reported, to which Dr. Marvel replied negatively.

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SATURDAY, MAY 27, 1899.

## CELL INCLUSIONS IN CARCINOMA INTERPRETED AS BLASTOMYCETES.

The search for infectious agents in the malignant tumors has passed through many curious phases. Nearly all the formations or bodies interpreted as the probable causes of these tumors have soon lost the significance at first put upon them. The various bacilli and cocci, the coccidia, the gregarinæ, the amebosporidia, the hematozoa have all suffered this fate.

Of late, Italian authors have urged that malignant tumors are caused by blastomycetes. The various peculiar bodies found in malignant tumors are regarded by them as blastomycetes. The coccidia and protozoa of previous writers were, according to SANFELICE and others, blastomycetes. The literature bearing on this, the latest phase of the search for the cause of sarcoma and carcinoma, has already reached gigantic proportions. The Italian investigators have published their articles in two or three scientific journals at the same time and in as many languages.

Strange to say, this new phase in the study of malignant tumors has not, as yet, attracted much attention outside of Italy, if we are to judge from the paucity of contributions on this problem from other countries. In connection with this, it is of interest to record that CARL STERNBERG of Vienna (Ziegler's Beiträge, 1899, 25, p. 554), reaches the conclusion from his recent investigation of this question according to the technic methods described by the Italians that the so-called blastomycetes are also products of cell degenerations.

In the first place, it is to be noted that the somewhat elaborate technic procedures prescribed by SANFELICE and others are in reality not specific staining methods but rather more or less unimportant modifications of the well-known GRAM'S method. STERNBERG examined a number of glandular and flat-celled carcinomas with this method, with a view to reaching some definite idea as to the nature of the various bodies thus revealed.

As expected, it was found that carcinomas in general contain a variety of cellular inclusions which retain GRAM'S stain even after thorough decolorization. These inclusions correspond to the descriptions and illustrations of the large number of authors who regard them as blastomycetes, and who place them in etiologic relation to the tumors in question. Similar bodies have also been found in other pathologic processes, such as keloid, lymphosarcoma, hyperplastic tonsils, smallpox, and a large number of benign, mesoblastic and other tumors as the causes of which they have also been interpreted. These bodies are, generally speaking, regarded by the majority of pathologists who are not cancer-parasite enthusiasts, as the so-called hyaline bodies produced by degenerative, secretory and coagulative processes in morbid as well as occasionally and more rarely in approximately healthy tissues (LUBARSCH).

It therefore has long been recognized that morphologic characteristics alone no longer suffice to establish the parasitic nature of these inclusions, and this is acknowledged by SANFELICE and other champions of the blastomycetic theory of carcinoma.

SANFELICE saw two roads open for the further solution of the problem; he could either cultivate a blastomyces from a tumor in a human being and inoculate the organism into susceptible animals, or he could use blastomycetes obtained from fruit juices, for the same purpose. In the animal lesions thus produced, it could then be seen whether similar bodies, as the cancer parasites, or hyaline bodies were produced.

Selecting the second method, he found in the experimental tumor-like swellings which resulted, bodies like those in real tumors. The histologic structure of the swellings which result in animals from the injection of blastomycetes from various sources does not, however, correspond so closely to that of carcinoma, for instance, that the production of experimental malignant tumors can be definitely said to have been secured.

PELEGATTI, furthermore, found that blastomycetes in pure cultures and cellular inclusions and other bodies in carcinoma do not stain alike when treated in exactly the same way.

SANFELICE objected to PELEGATTI'S reasoning, because, he says, PELEGATTI did not examine tissues containing blastomycetes. In answer to SANFELICE'S criticism, it may be urged that the bodies in experimental lesions due to blastomycetes are not necessarily changed blastomycetes, but hyaline formations produced in these lesions for similar reasons, as like bodies in other tissues.

STERNBERG found that pathogenic blastomycetes stain quite the same in the lesions they induce as in the pure cultures, at the same time as he acknowledges that some of the bodies found in the resulting lesions greatly resemble the bodies found in carcinomas and other tumors.

According to STERNBERG, MAFFUCI and SIRLEO, the new formation produced by some blastomycetes when injected into animals can not be regarded as having the histologic structure of carcinoma or sarcoma, but rather as granulomatous productions.

FABRE-DOMERGUE, in his recent book, on "Les cancers épitheliaux," makes the following statement, which well covers the situation of this phase of the cancer parasite question in its present form: "The forms described as sporozoa have merely the morphologic resemblances and not the true characteristics. All the pseudococcidia so far pictured are connected by insensible gradations with the tumor cell from which they emanate by way of degeneration."

STERNBERG concludes that while the investigations above alluded to have given rise to a closer study of the cells they have not advanced our knowledge of the etiology of tumors a single step.

Here in America, it may be hoped that the scientific study of cancer recently inaugurated in Buffalo, N.Y., under the guidance of ROSWELL PARK, may lead to results which will stand the criticism of pathologists better than the investigation above alluded to in a general way.

## MALARIA AND TYPHOID, NOT "TYPHO-MALARIA."

Among the many debts the clinician owes to the pathologist and bacteriologist is the means of accurately determining between typhoid and the malarial fevers. Not many years ago the occurrence of frequent chills and rigors in a case thought to be typhoid would, if not entirely change the diagnosis, at least give to the disease that most objectionable appellation, "typho-malaria." The teachings and writings of OSLER have done much to dispel this view, but it still unfortunately exists to a very considerable extent. On the other hand, a continued fever, if not typhoid, was not thought malarial in origin, and we are again indebted to JOHNS HOPKINS in the persons of THAYER and HEWETSON for interesting observations on the continued malarial fevers. Bacteriology of the past few years has taught us how common it is for infections of two or more pathogenic germs to exist in the same body at one time; a patient with typhoid may develop pneumonia and both the typhoid bacillus and the pneumococcus be reported among bacteriologic findings; we are too painfully aware of the frequent association of the pneumococcus with the bacillus tuberculosis; so also we not uncommonly have mixed infections of the typhoid bacillus and the plasmodium of LAVERAN. During the last five years, isolated instances of the association of these two diseases have appeared with increasing frequency in medical journals, and this has been particularly common since the Widal reaction has opened so ready a path for the rapid diagnosis of typhoid. Prevalent, as both these diseases have been, among the soldiers in our new neighboring possessions, it is not strange that many instances of these double infections have appeared of late. DACOSTA (*Phila. Med. Jour.*, May 6, 1899) has reported ten cases in which there were unmistakable evidences of combined infection; malaria proved by the presence of the plasmodium in the blood; typhoid by the usual clinic symptoms and course, and the positive character of the Widal reaction. It is worthy of note that while the patients may have suffered from chills long before the onset of their typhoid fever, yet the malarial element in the case remained latent until convalescence from the typhoid had begun to be established; thus many of the cases failed to show the plasmodium until the fourth week, though frequent examinations for it may have been made, and the history have pointed to its presence months previously. Another point in favor of this late latent infection is that all the cases were removed from malarial districts to a location where tertian malaria was uncommon and the estivo-autumnal practically unknown. The majority of the malarial infections were tertian, the rest estivo-autumnal, so that chills occurring every day or every other day were the rule. Some of the cases, however, those of the estivo-autumnal variety, failed to show chills or rigors at any time, and the combination of slight elevation of temperature above the normal, occurring during convalescence, followed by sweating, were the symptoms that suggested an examination of the blood. When the malarial attack occurred before the temperature from the typhoid fever had reached the normal, curious, irregular combinations of temperature resulted, and it might be here stated that this irregularity of temperature in a case of typhoid without obvious complications should always put us on our guard and lead to a careful search for the plasmodium. Coming on, as the malaria does, so late in the disease, another point can be inferred, namely, that of the two infections the typhoid is much the stronger; while clinically this late appearance is of importance in that it greatly adds to the duration of the febrile attack. The effect of quinin on patients stricken with both diseases is marked, both as regards the temperature-chart and the improvement of the patient's condition. But it must be borne in mind that the specific effect is on the malaria alone; that there exists no such pathologic entity as "typho-malarial" fever; that cases diagnosed as such are, in the vast majority, instances of pure typhoid; and lastly, that the administration of paludal doses of quinin in cases of typhoid often works the greatest harm, both in cinchonizing the patient and in detracting attention from a line of treatment more fitting the case.

PUBLIC SCHOOL INSTRUCTION IN COOKING.

In the year 1888 the city of New York introduced manual training into the curriculum of certain of its public schools. Objection was raised to this innovation on the ground that this work was beyond the sphere of school teaching, and that any effort to make a boy a mechanic during the progress of his general education would necessarily fail. On the other hand, it was argued that the obvious duty of the public school is to prepare the pupil for his future career, and that nothing could be better adapted to this purpose than an educational training to the eye, the hand, and the mind, which would qualify the boy to meet the ordinary emergencies of life. The intention of giving a specific technic training was disclaimed. Because a boy is taught handiness in the use of certain common tools, it no more follows that this is done in an ineffectual attempt to make him a carpenter than that the general knowledge which he carries with him from the public schools is the result of a futile effort to make him a school-teacher. But, whatever objection may be raised against manual training for boys, it does not apply to the inclusion of cookery in the curriculum for girls. Although many of the girls of this generation become wage-earners in various lines of commercial and business life, for self-support or to add to a strained family income, there are few who look forward to a prolonged continuance in these lines. The girl's vocation in the world is to be a wife and mother, to be the mistress, caretaker and manager of her home. A knowledge of cookery, kitchen management, and domestic economy is essential to her efficiency in this position. She may not have to attend to the working details, but a practical familiarity with them is necessary to qualify her for efficient superintendence. The thriftlessness in American kitchens resulting from ignorance of the application of methods to materials and of many other points in kitchen management has been verified by numberless observations by the agricultural department.

The national health and wealth are therefore involved in this subject. Home training can not be relied on to remedy present conditions. It would merely perpetuate them. The Board of Education of New York City saw a possible solution of the problem when it resolved that, in the girl's grammar schools cooking should be taught in certain of the grades. Since then this movement has progressed rapidly, as shown by Bulletin No. 56 of the department of agriculture on the history and present status of instruction in cooking in these schools. One object of the publication of this bulletin is to encourage the extension of the movement into the rural districts. According to A. C. TRUE, the director of the experiment stations of the department: "If it is a good thing to have the girls of New York City taught better methods of cooking and the reasons why good housekeeping is vitally connected with the health and general welfare of our people, surely it must be equally desirable that up-to-date information on such subjects should be imparted in our country schools." Medical men who know the value of a trained nurse can readily appreciate the value of a training which will not only make American wives prudent, economic, and thrifty, but which will establish a sanitary régime in every room in the home as well as in the kitchen and dining-room. The course of cookery is not restricted to the mere making of palatable, nourishing, and economic dishes, but includes instruction in food values and cost, chemic changes and hygienic influences. Thus, in the syllabus of lessons on the chemistry of cleanliness, we find household cleanliness thoroughly discussed and the distinction explicitly drawn between tidiness and sanitary cleanliness. Dust and its dangers are fully studied. In fact, the course as shown in this bulletin might be called rather a course in domestic sanitation than one in cookery. An enthusiast on this subject has written: "With such intelligent and earnest workers, do you think it too extravagant to hope that an article may some day be written telling that the teaching of cookery or home science has greatly reduced infant mortality, contagious diseases, intemperance (in eating and drinking), divorces, insanity, pauperism, competition of labor between the sexes, men's and women's clubs, etc.?" No, we do not think it too extravagant. On the contrary, we consider that the State and the Nation will reap much benefit from the earnest labors of the workers in this promising field of sanitary culture.

AUTOINTOXICATION.

By autointoxication, or "autotoxemia," as the term implies, is meant self-empoisonment, or, in other words, poisoning of the system through the medium of products generated within the living body, and due to faulty metabolism. Strictly speaking it may be a question whether or not by this terminology we should also include the absorption of ptomains which are not the result of faulty metabolism of the living body, or more accurately speaking, living tissues of the human system. Autointoxication thus has a limit. Ptomains arise from fermentation, or from putrefaction, while the products of the living structures arise during the growth and decay of the individual cell or group of cells. During the latter process it is not ptomains which are formed, but leucomains. In septicemia, sapremia, and the infectious fevers, we dread poisoning from ptomains. In gout, neuralgia, neuritis and many other nervous affections, we dread leucomains. Alteration in the structure or metabolic activity of the ductless glands produces true autointoxication, while excessive intestinal putrefaction poisons the system by ptomains. The ductless glands furnish products, and regulate and furnish material necessary for the nutrition of the body. In other words, they act as regulators of metabolism and

as a whole are absolutely essential for life in the human system. Leucomains are built up by the system by synthesis, and they also result from processes of oxidation. The essential process in the formation of ptomains is one of oxidation, together with the formation of sulphuretted hydrogen gas, carbonic acid and water. Thus in the embryo, organs are built up synthetically, that carry on the vital activity and nutrition of the fetus, which, without those organs, would die. Abnormal secretion in the embryo may lead to death or the production of autointoxication. Ptomains result from the life of bacteria. In the vegetable kingdom bodies chemically allied to ptomains are formed during the life of the plant, and we denominate them "alkaloids." Is bacterial life absolutely essential to the life of the human embryo? It would appear that in so far as the lower animals are concerned this has been settled by the experiments carried on by MULTACE and THURFELDER, who obtained ripe fetal guinea-pigs by means of a Cesarean section carried out under strict antiseptic precautions. According to SCHÄFER, they introduced the animals immediately into an aseptic chamber through which a current of filtered air was aspirated, and fed them hourly with sterilized milk, day and night, for eight days. The animals lived and throve and increased as much in weight as healthy normal animals subjected to a similar diet. Microscopic examination at the end of the experiment showed that the alimentary canal contained no bacteria of any kind, nor could cultures of any kind be obtained from it. In those animals true autointoxication might have occurred. Our knowledge at the present time regarding the leucomains has resulted for the most part from the work of GAUTIER, ERNEST IMMANUEL FELIX HOPPE, better known as FELIX HOPPE SEYLER, and his pupils, KÜHNE, ALEXANDER, SCHMIDT, VON RECKLINGHAUSEN, FOX, BAUMANN, KÖSSEL, VON JAKSCH, and, in our own country, to VAUGHAN, NOVY, HERTER and CHITTENDEN.

As has been previously stated, leucomains may also arise by processes of oxidation. Beginning with the most complex molecule, cleavage begins, and it seems altogether probable that one leucomain may give rise to another. Thus in the series, hypoxanthin, xanthin, and uric acid differ only in the number of atoms of oxygen, the formula in reverse order being: hypoxanthin ($C_5H_4N_4O$), xanthin ($C_5H_4N_4O_2$) and uric acid ($C_5H_4N_4O_3$). While in the formation of leucomains the process of cleavage in the molecule takes place by oxidation, and while it seems reasonable to suppose that the above series correctly represents it, it may be stated that at the present time such can not be demonstrated.

Physiologically the leucomains may be poisonous or wholly inert. Thus in the poisonous ones may be classed paraxanthin, methyl xanthin, heteroxanthin, xanthocreatinin and gerontin. Heteroxanthin and paraxanthin injected into the lower animals produce a rigor mortis condition, dyspnea and convulsions. Xanthocreatinin produces depression, somnolence, fatigue and vomiting. Gerontin produces a paralyzing influence on the nerve-centers and ganglia of the heart. The "Black Hole of Calcutta" will always furnish proof of the existence of leucomains in the expired air.

## UNDERTAKER'S COMMISSION.

What sort of a compliment is it to a doctor for an undertaker to offer him a commission? Such a thing does not appear to be incredible in England, judging from a recent editorial note in the *Practitioner*. An offer of a percentage on the funeral expenses of patients might be consolatory to some, but it would be at least a little embarrassing, and one would have to strain his professional conscience a little to accept it, aside from the ordinary aspects of the case in medical ethics. It ought to be only a hardened irregular that could relish the offer.

## THE "INDEX MEDICUS."

The discontinuance of the publication of the "Index Medicus," just announced by Dr. FLETCHER, the editor, is a distinct loss to medical literature. That a periodical of this kind, which has existed for nineteen years to the honor of our profession and our country, should have to die for want of support is certainly regrettable. It is, however, a fact that a work with a circulation necessarily so limited could hardly be expected to thrive in a pecuniary point of view, and that its maintenance must necessarily be at some sacrifice on the part of its publishers. This fact, however, makes no more satisfactory the announcement that the decision to discontinue it is final. One can hardly help thinking that such a task would be a fitting one for a government to undertake in the interest of science and for the general good. The United States Government has already a similar one on its hands in the publication of the "Index Catalogue," and the medical profession will probably have to be content with that in the future, though it hardly fills the place of the "Index Medicus."

## SPIRITUALISM AND INSANITY.

A trial has just been concluded in Pittsburg, in which a woman was accused of murdering her mother. The fact of the matricide was admitted, but the defense of insanity was made, combined with a plea of justification on account of belief in spiritualism. The whole family were spiritualists, and this daughter, the defendant, claimed that she had a message from her father, who is in spiritland, to the effect that he was lonely and disconsolate. To relieve this sad condition of the father, the daughter conceived the brilliant idea of sending the mother to him, which idea she carried out. And the jury brought in a verdict of not guilty. The ground of defense was insanity, but the lawyers skilfully let the case go to the jury with a plea on account of spiritualism as

well as insanity. It is not known on which phase of the defense the jury rendered its verdict, but if on account of spiritualism, it certainly gives the spiritualists the "inside track" in the murder business. In any event it places these people in a very definite position before the law in Pittsburg—if they are spiritualists and believe what the spirits tell them, they are insane.

## ADENOFIBROMA OF MALE BREAST.

The rudimentary male breast is far less frequently affected by morbid processes than the same organ in the female. The so-called hypertrophy of the breast has been observed in man; acute and chronic mastitis and the malignant tumors have also been described. Adenofibroma, however, seems very rare, and its occurrence in the male breast is not even mentioned by the principal authors on mammary tumors. VIRCHOW and BEADLES each describe a case and recently MILIAN and RAVANIER add another (*Bulletin et Memoires de la Société Anatomique*, March, 1899) in a boy of 14 years. From what has been observed it is probable that this growth is frequently overlooked because of its small volume and freedom from pain, and also on account of its similarity to other processes, as for example so-called simple hypertrophy and chronic mastitis. In the latter process there is usually swelling of the axillary glands, which is absent in adenofibroma. It is believed that attentive clinic study, aided by histologic examination, may throw more and needed light on these two diseases of the male breast.

## "CHRISTIAN SCIENCE" AND DEATH CERTIFICATES.

A question has arisen in Michigan that may be of some interest and importance. According to the Owosso *Reporter*, a local physician, Dr. HUME, wrote to the State board of health relative to the signing of a death certificate by "Christian Scientists," who refused to do this in a case that had been under their treatment. The State board decided that any one treating disease, no matter how, is a physician in the meaning of the law, and should sign the certificate if the patient dies under his or her care. A further reference is to be made, it is stated, to the attorney-general, and his opinion obtained. It is easy to see how it might be embarrassing for a "Christian Scientist" to have to sign death certificates, and how it might raise some interesting legal points were they compelled to do so. Their metaphysic conceptions of disease would hardly fit in readily in the regular classifications, and some curious statements might be expected. But it would seem advisable for them not to leave the certificate to others, who might very properly give "neglect induced by faith in 'Christian Science'," as the cause

## INFLAMMATION OF GALL-BLADDER DUE TO TYPHOID BACILLUS.

The occurrence of a cholecystitis due to the bacillus of typhoid fever is now well known. Usually it concerns rather superficial processes, but occasionally the cholecystitis may assume a suppurative and even gangrenous character as, for instance, in the case described by V. WUNSCHEIM (*Prag. Med. Woch.*, 1898) which developed during the course of the fatal typhoid attack and in which the bacteriologic examination showed the typhoid bacillus to be present in the gall-bladder and the biliary passages, and the typhoid bacillus and yellow pus coccus in the circumscribed peritoneal exudation over the gall-bladder. The staphylococci were found only upon the peritoneal surface of the bladder, and hence it may be assumed that they represented a secondary invasion from the lumen of the intestine. In another case described by IMHOFER a peritonitis developed suddenly, four weeks after the end of an attack of typhoid fever, in a woman aged 40. A laparotomy was made, a general peritonitis found due to a suppurative cholecystitis, the gall-bladder being filled to distension with thick pus in which the typhoid bacillus existed in pure culture. These cases illustrate the rôle the typhoid bacillus sometimes assumes as a pyogenic agent. Knowing the frequency with which this organism is to be found in the bile in the gall-bladder during and after typhoid, it is to be expected that destructive effects of virulent bacilli should occur here from time to time.

## FORTUNES LEFT BY BRITISH PHYSICIANS.

According to the London *Lancet*, the large fortune (£375,000) left by Sir WILLIAM JENNER was not wholly made in the practice of his profession, but a large fortune was left him by his brother and a certain portion derived from trade, though he undoubtedly earned a large sum by the practice of his profession. Large fortunes have been left by other eminent British physicians as follows: Sir ANDREW CLARK, an estate valued at £203,970; Sir OSCAR CLAYTON, £146,746; Dr. RHODES ARMITAGE, £217,420; Dr. L. T. CUMBERBACH, £107,000; Sir RICHARD QUAIN, £116,780; Mr. HENRY HORSFALL, £105,780; Dr. G. D. LONGSTAFF, £107,000; Dr. HENRY DANSON, £119,290; Dr. J. H. PAUL, £100,052. The largest estate, however, is that of Sir WM. GULL, valued at £334,023. Sir WILLIAM GULL, like Sir WILLIAM JENNER, made an enormous professional income, though fortunate investments perhaps played the part in swelling the total of his fortune that family bequests played in the case of Sir WILLIAM JENNER. The above was compiled from the *Daily Telegraph* and *Westminister Gazette*, and covers the last ten years. The *Lancet* adds that on the strength of them the medical profession can not be said to abound in pecuniary prizes. Only eleven persons, whether shining in the front rank of the medical profession or engaged in one of its notoriously lucrative branches, or blessed by accident with pecuniary advantages, have died during ten years in possession of more than £100,000, while a first-class brewer's fortune would be expected to amount to more than the aggregate total of the eleven medical fortunes, or the brewer would be accounted a comparative failure. The *Lancet* wishes to state that it is not setting up a wail that medical men do not make more money, but the fortune of Sir WILLIAM GULL ought not to lead the public to mistake the facts as to

the average earnings of the medical profession. The profession of Great Britain numbers some 28,000 persons, and although now and then one man dies rich the vast majority die otherwise.

### A QUESTION OF PRIORITY.

The *Indian Medical Gazette* claims to have found a case of scientific plagiarism in the recent publication of the discoveries as to the life history of the malarial parasite by the Italian observers, BIGNAMI, GRASSI and BASTIANELLI. It claims that these investigators were directly incited by those of Major ROSS of the Indian Medical Service, who, in 1897, published in the *British Medical Journal* observations showing that he had followed the estivo-autumnal malarial parasite of man into the dapple-winged mosquito, and that his publications, as well as specimens prepared by him, were furnished the Italian investigators before they carried out their recent research, and that it is allowable with these facts to presume that their attention was directed to the *Anopheles claviger*, likewise a dapple-winged species, on account of this information. They do not credit ROSS, however, with any priority, according to the *Gazette*, but merely say: "The observations reported up till now permit us to reconstruct the life cycle of the human hemosporidia in the body of the *Anopheles claviger;* it finds for the most part confirmation in that observed by Ross regarding the proteosoma of birds in the gray mosquito." It would appear from these statements that if the Italian scientists said no more as to Ross' discoveries, they did not do justice to the British investigator. It certainly does not appear from the translation of their paper, also given in the *Gazette*, that they did recognize the fact here claimed, that he had as early as 1897, a year before their publication, also traced the development of the human malarial parasite.

### SYRINGE NOZZLE AS A CARRIER OF INFECTION.

It is well known that foreign bodies introduced into the vagina and uterus are liable to carry infection to the pelvic organs. The male organ of generation, infected with gonorrhea, the unclean digit, the speculum, the tenaculum, the sound, the dilator, and even the tampon, are credited with the causation of diseases of the female generative organs. A prominent gynecologist has gone so far as to ascribe the supposed greater prevalence of female diseases of the present day to the abuse of the mechanic treatment of uterine diseases. Whether women of the present generation are suffering in greater numbers from pelvic diseases than they did in the past is a question on which we have no sufficient data from which to draw conclusions. There is one thing, however, which probably causes more trouble than all the mechanic treatments put together, and that is the syringe nozzle. The majority of women possess and use a fountain syringe. Long before they ever consult a physician, they have used the syringe at the suggestion of the mother or friends. The use of the syringe is almost universal and indiscriminate, and in the majority of cases, during the intervals between usings, it hangs on a nail in the sleeping-room or bathroom, the tube with the nozzle attached finding its resting-on the floor or in contact with septic material. Not one in a hundred washes the nozzle before using it, saying nothing about sterilizing it. Might not the nozzle be a great source of infection? As far as we know, there is no literature on the subject, and the text-books are silent on the matter. Would it not be instructive and profitable for gynecologists and general practitioners to investigate and pay attention to this indiscriminate use of the fountain syringe?

### THE TONSILS A GATEWAY FOR INFECTION.

Two recent papers have directed attention anew to this important topic, which, while seemingly threadbare, is frequently overlooked by the practician. That the tonsils are the locus of infection in diphtheria, scarlet fever, and other infections has long been known, but the relation between tonsillar inflammation and acute rheumatism is not yet universally acknowledged. In the *Münchener Medicinische Wochenschrift* for March 7, M. de ROCHMONT reports an epidemic which occurred in the Altona Hospital, following the admission of a patient suffering with acute articular rheumatism and follicular tonsillitis. From this patient seventeen others and a nurse, all in five wards on the same corridor, developed tonsillitis. As there had been no case of sore throat present until the admission of this patient, the source of infection seemed clear. This epidemic also showed how far from trifling is follicular tonsillitis. Of the eighteen cases, three had acute articular rheumatism following the sore throat, one had acute nephritis, one endocarditis, one pericarditis and one acute myocarditis. The cases were fortunately all carefully studied bacteriologically, but the only organisms found were staphylococci and streptococci, with a few apparently non-pathogenic streptobacilli. On May 3, Dr. F. A. PACKARD of Philadelphia read a paper before the Association of American Physicians at Washington on acute endocarditis of tonsillar, origin. He reported five cases of endocarditis, each of which had been preceded by tonsillitis. The discussion which ensued demonstrated that many experienced clinicians have observed such complications of tonsillitis as fatal streptococcus poisoning, pleuritis, iritis, and those above noticed. These experiences are by no means uncommon, but the necessary connection between the preceding inflammation of the tonsils and the subsequent grave disease has not been as generally recognized as its seriousness demands. Almost every physician can recall cases from his experience in which sore throat existed before the onset of some grave infection, but was regarded as accidental instead of essential. The painstaking studies above quoted, and many others, place upon a safe basis the etiologic relation of tonsillar infection to many other local or general diseases. ROCHMONT says that at the Altona Hospital they now isolate all cases of sore throat. Clearly the same practice should be followed in all hospitals. In private practice isolation should be carried out in so far as is practicable, and thorough

cleansing of the throat with alkaline and antiseptic washes and sprays is imperative. In general, the ordinary sore throat is not to be looked on as necessarily a benign and self-limited affection. The fact that it usually is so will not excuse the case of endocarditis, with permanent crippling of a life, which may follow neglect to appreciate the careful treatment that the initial tonsillar disease demands.

## HARD LUCK.

The dangers of surgical practice are multiplying. In the JOURNAL of April 15, a paragraph was given to a case that recently occurred in Germany, where a surgeon changed the operation he was intending to perform to another that he found indicated while the patient was under anesthesia. The patient, though apparently grateful at first, strongly objected when the bill was presented, and it was stated that the court decided that he was censurable for not stopping and waiting for the patient's consent. A supplementary report of the case in the newspapers states that the patient, not content with getting off from payment of the bill, brought an action for assault or bodily injury, and the supreme provisional court has just delivered judgment, and while admitting that the operation has probably lengthened the patient's life, it holds that it was not done with the patient's knowledge or approval, and might have been attended with danger, it was an intentional and illegal bodily injury. The public prosecutor has, therefore, announced his intention of instituting a criminal prosecution of the surgeon. The moral to be derived from these facts is never to operate without a free hand has been given by the patient and even to require a contract if there is the remotest doubt as to the patient's reliability or good faith. Not many laparotomies are performed in which the surgeon knows exactly what he is going to do. Hence the importance of special care in such and all other operations with similar uncertainties. The public is beginning to learn its legal privileges and if due precautions are not used, the surgeon may find his patient prosecuting him before a judge who deems himself competent to decide as to the urgency or necessity of the operation, and the rest of the profession may have also to suffer from judge-made law covering matters that were before supposed to be questions of scientific medical opinion. At least such would seem to be the case in Germany. An interesting point is what would be the decision if a patient should sue a surgeon for not doing what he in his best medical judgment thought necessary and subjecting him or her to the perils and delays of a second operation. The courts might then perhaps decide against him, and the profession would be left "between the devil and the deep sea."

## THE SPREAD OF INSANITY.

At the recent meeting of the Nebraska State Medical Society, a lengthy debate occurred on the spread of insanity and how to prevent it. The conclusions were that the great increase in modern times was due to "hereditary causes, the discharge from asylums of half-cured patients left free to propagate their kind; the fostering care of Christian institutions; the effect on immature minds of dwelling on the doubts raised by dogmatic Christianity, and the cramming of young minds by modern educational methods." These are propositions that fall in with popular notions, but whether they are all equally correct is another question. Heredity is more effective now than formerly, only in a secondary way; if there are more insane now than there were, there are more to transmit their defect. Its importance, therefore, depends on the existence of other factors causing the increase. Undoubtedly there are many imperfectly-cured patients discharged, but before the days of asylums, the semi-insane and the cranks were at large, subject to no restrictions whatever, so that the importance of that fact as a causal factor now as compared with former times may be easily overestimated. There is no question that under our modern Christian civilization more lunatics survive and more become a public charge than was formerly the case, but it is less clear that religious doubts have such an important influence as is here attributed to them. Dogmas cause far less mental worry in modern life than they did to our ancestors, and a religious tincture in insane symptoms is far from being always an indication that religion caused the insanity. It is not probable that religion disorders more minds now than it did several generations ago, when men were as intense, if not more Christian, in their theology. Overstrain in the education of the young is undoubtedly a very great cause of mental breakdowns, but the most important of all factors seems to have been overlooked in the discussion, or, at least, it is not reported as having been duly considered. It is the effect of the conditions of modern civilization on weak brains that could have easily endured the minor strains of a less complicated and intense social and physical environment. This is the last straw that breaks the camel's back in a very large proportion of the multiplying cases of mental diseases of the present day. Comparatively few of the inmates of our asylums are naturally strong-minded individuals, nor are they all essentially degenerate, in the proper sense of the term. They are simply eighteenth-century individuals born out of their time and introduced into the modern age of steam, electricity and the present push and struggle for existence. This is what makes urban populations so prolific of insanity and fills our asylums with recently-immigrated foreigners. Whether the remedy of restriction of marriage and other methods to prevent propagation of the insane, as advocated at the Nebraska meeting, will be as effective as some partakers in the discussion seemed to suppose is, under the circumstances, at least questionable.

## INFANTILE CEREBRAL PALSY AND EPILEPSY.

Epilepsy as a symptom frequently follows in the track of gross cerebral lesions of a varied nature, and is especially seen after the cerebral palsies of infancy. Most of the arduous and painstaking work on child palsies has been done within the last ten years by

German, English and American writers. We now have the voluminous work of FREUD—a fitting consummation of all the works of the other authors. It is a valuable book to us at present, as more careful attention to-day is being paid the mentally deficient child from a medicopedagogic standpoint. Unfortunately, FREUD'S work has not been translated from the German. Much doubt still exists whether infantile eclamptic convulsions can cause cerebral hemorrhage. GOWERS, in discussing epileptic convulsions, states that apoplexy caused by the epileptic paroxysm is an exceedingly rare event. The prominence which convulsive phenomena play in the onset of cerebral palsy in childhood has led many to urge it as a cause of the cerebral mischief. Yet the fact that convulsions are almost always present in any serious destructive brain lesion makes us hesitate to accept it as a cause for child palsies. Again, epilepsies in severe convulsive stages may exist for years without terminating in cerebral hemorrhages. Indeed, from practical experience we all know how great a rarity it is to see cerebral hemorrhage in epileptics at any time; epileptics most frequently die from an intercurrent disease. It is not an uncommon experience to see a partial palsy become complete after a second attack has occurred; separated from the first by weeks or months, the interval between being free from convulsions. SACHS and PETERSON have reported some cases of this character in this country. The cerebral lesion is almost always accompanied each time by a series of convulsions. FREUD maintains that all epilepsies are of apoplectic origin, either extra- or intra-uterine. He is very plausible in the presentation of his evidence; but of course his conclusion will not be universally accepted. The percentage of palsied cases that ultimately become epileptic is steadily growing; many epilepsies resulting from slight hemiplegia, in the light of careful research and better clinic methods, can no longer pose in a garb of mystery. Probably the number ultimately becoming epileptic will far exceed the 40 per cent. given to-day. Close observation of the reflexes, disorders of motility, and trophic changes in suspected cases, especially noted by SACHS and FREUD, will always be essentials in the diagnosis. The onset of epilepsy in a palsied child may be postponed for years, and the attention of relatives and physician should not cease after the acute symptoms; much can be done for the little patient along hygienic, dietetic, and medicopedagogic lines. The so-called higher education is not for these patients. Indiscriminate use of bromid, if epilepsy develop, can not be too heartily condemned; even used symptomatically it is of but little use except at the serial periods. The posthemiplegic epileptic is always an object for great care, as his seizures generally group themselves in periods, and are liable to culminate in status epilepticus and death. The seizures localize or predominate on the weakened side, and in serial periods, the power of the hemiplegic side is more or less completely lost and recuperation is very slow. The slight hemiplegias come prominently to the front once more after the severe exhaustion from serial attacks; unfortunately, many epileptics have waited until this time before a proper recognition of the true brain lesion was accorded them. We trust that a wider dissemination of the ideas of FREUD'S work on infantile cerebral palsy will aid practitioners to avoid many evil results of child palsies.

## Medical News.

DR. GUSTAV FÜTTERER, Chicago, has been elected professor of pathology in the Northwestern University Medical School.

PROF. N. SENN, M.D., Chicago, has been honored with the degree of LL.D., by Jefferson Medical College, Philadelphia.

DR. E. E. MONTGOMERY, Philadelphia, entertained the members of the American Gynecological Society at a luncheon at the University Club of that city, May 24.

DR W. H. CRANE, Cincinnati, has been made professor of chemistry in the Ohio Medical College and, Dr. A. V. Phelps adjunct professor of anatomy in the same institution vice Cilley, resigned.

ON ACCOUNT of the smallpox scare in that State, the State board of health has instructed the boards of education of the various Kansas towns to require school children to be vaccinated.

DR. J. R. BUIST has been chosen to fill the chair of obstetrics in the Vanderbilt Medical College, Nashville, Tenn., for the session. Dr. Buist has heretofore been lecturer on nervous diseases.

RECENT DISPATCHES received in London announce that a serious epidemic of cholera has followed in the wake of the plague at Allahabad. At Kurracheo there occurred sixty-four deaths in one day.

AFTER a continuous service of thirty years, Dr. John L. Cilley of the Ohio Medical College, Cincinnati, has resigned as adjunct professor of anatomy. Dr. A. V. Phelps was appointed in his place.

THE NEW German Hospital, Brooklyn, N. Y., was dedicated May 21. The hospital, entirely fire-proof, consists of a group of four buildings, connected by covered passageways, the main building four stories high.

RUSSELL SAGE has given $50,000 to the new building fund of the Woman's Hospital of New York. Work on the new building will be begun in the fall. Evidently Mr. Sage has taken a hint from Mr. Carnegie.

THE ANNUAL commencement of Rush medical college, Chicago, was held the afternoon of May 25, the doctorate address being delivered by the Rev. Andrew Morrissey, president of Notre Dame University. The preceding days of the week were largely given up to class day and alumni festivities, the closing exercise being a banquet on the evening of the 25th, at which addresses made by Rev. Morrissey, the Hon. Carter H. Harrison, Mayor of Chicago, the Hon. William J. Byrne and Rev. William J. McCaughan of Chicago, and President William R. Harper of the University of Chicago.

ACCORDING to a recent dispatch from United States

Consul Ayme of Pointe a Petre, Island of Guadaloupe, the State Department at Washington has been notified of the removal of the quarantine restrictions against Porto Rico.

DR. CHARLES B. PENROSE, professor of gynecology at the University of Pennsylvania, has resigned from this chair on account of impaired health. His resignation has been accepted with regret on the part of the board of trustees.

BY THE WILL of Dr. Joseph Kirkbride, who recently died in Philadelphia, $5000 has been received by the Pennsylvania Hospital. To the microscopic section of the Academy of Natural Sciences he bequeathed his microscope and all accessories.

PROF. CHRISTIAN FENGER, M.D., has accepted the position of professor of clinical surgery, Rush Medical College. For several years he has held the position of professor of surgery in the Northwestern University Medical School—Chicago Medical College.

ON MAY 16, the commencement of the University and Bellevue Hospital Medical College, New York City was held—the first since the Bellevue School united with the medical department of the University of the City of New York. The graduating class numbered 160.

THE MUNICIPAL assembly has sent to the board of health of New York City a resolution lauding the board for its vigorous action in its efforts to discover and bring to trial persons guilty of practicing medicine without a license, and urging the board to continue in the good work.

AT THE annual banquet of the society of internes of the Cincinnati Hospital, held May 19, 1899, the following officers were elected: president, C. R. Holmes; vice-president, E. W. Walker; secretary, Albert Freiberg; treasurer, J. C. Oliver. At the banquet Dr. S. E. Allen acted as toast-master.

THE FACULTY of the University of Pennsylvania have chosen Dr. G. G. Davis to succeed Dr. John B. Deaver, whose resignation takes effect at the end of the present term. Dr. Davis at present holds the chair of assistant demonstrator of anatomy. The nomination of Dr. Davis now awaits the action of the board of trustees.

A CORONER in New York City has asked the president of the board of health to make an investigation of a certain quack establishment professing to cure not only consumption, but cancer and almost all other diseases, which has branch offices in Chicago, Boston and Philadelphia, and which advertises extensively in the German newspapers.

THE FOLLOWING, representing the regular school, have been appointed members of the board of medical examiners in Idaho: president, L. P. McCalla of Boise; vice-president, W. W. Watkins of Moscow; secretary and treasurer, R. L. Nourse of Hailey. Every effort will be made to make the new law which went into effect March 3, operative.

COMMENCMENT exercises of the Long Island Hospital Medical College, were held in Brooklyn, May 16. Only 60 out of a graduating class of 108 were awarded diplomas. Of the remaining applicants for degrees 23 were rejected altogether, and 25 were conditioned, with the understanding that they should have the opportunity of another examination, after attendance at the summer session.

DR. LOUIS L. SEAMAN of New York, but later of the U. S. Army at Porto Rico, has been commissioned by the Government as special agent to examine the sanitary, dietary and climatic condition of the Philippine Islands. He is to have every facility and courtesy extended by the proper officials especially for the investigation of the Government ration question.

THE FIFTH examination for licenses to practice medicine in the State of New Hampshire will be held at the State House, Concord, on June 20 and 21, beginning at 8 A.M. All unlicensed physicians who were not in practice in this State on and before March 16, 1897, must pass the examinations in order to receive a license to legally practice their profession.

GOVERNOR ROOSEVELT has not yet determined whether to sign or veto the bill providing for shorter hours for druggists' clerks, recently passed by the New York Legislature. On account of the division of opinion on the subject among the clerks themselves, he has appointed Jacob Riis, the well-known philanthropist, to make a thorough investigation of the conditions under which they work and endeavor to find out the actual wishes of a majority of their number.

THE ANNUAL commencement of the Medico-Chirurgical College was held at the Academy of Music, Philadelphia, May 20, and 179 received the degree of M.D. The doctorate oration was delivered by Dr. Joseph M. Mathews, president of the AMERICAN MEDICAL ASSOCIATION, and the degrees were conferred by Dr. William L. Rodman. Dr. Mathews chose as his subject, "The Art in Medicine." Sixteen States were represented among the graduates. One was from Newfoundland.

DR. ELMORE S. PETTYJOHN, who assumed full control of the Alma Sanitarium, Alma, Mich., recently, has been connected with that institution, as superintendent, since 1893. The Doctor received his early medical training in Rush Medical College, Chicago, graduating in 1882, and his four years' experience in State and private institutions in Illinois, in nervous and mental diseases, and later extended practice, well fitted him for this line of work.

AT THE twenty-sixth annual conference of Charities and Corrections, just held in Cincinnati, the report of the chairman, W. A. Gates of St. Paul, on "Immigration," was accompanied with a draft of a bill proposing uniform charity legislation for all the States. The proposition of the bill is to the effect that a State residence continuously for one year, with the limitations the same as for voting, should constitute eligibility for the privileges of State benevolent institutions.

A GIFT of $25,000 has been made, through Mr. Alvan R. Johnson of Brooklyn, to the Hoagland Laboratory, connected with the Long Island Hospital Medical College, for the endowment of the Van Cott fellowship of pathology, in honor of Dr. Joshua Van Cott, the director of the laboratory. Dr. Van Cott, on whom, as director, the choice devolves, has selected Dr. Archibald Murray, who is at present his assistant in the laboratory, as the first beneficiary of the fellowship.

Dr. FLOYD W. MCRAE, Atlanta, Ga., who is to deliver the oration on surgery at the coming meeting

of the AMERICAN MEDICAL ASSOCIATION, has been ill since the meeting of the Medical Association of Georgia, over which he presided. He has been suffering from an attack of appendicitis, and not entirely recovering after the acute attack, he went to New York and two weeks ago was operated on by Drs. W. T. Bull and W. B. Coley. Dr. McRae is still in New York, but has about recovered.

DR. EMIL MAYER of New York City has been appointed co-editor for America, in the *International Cbl. f. Laryngologie und verwandte Wissenschaften*, of which Sir Felix Semon of London is editor-in-chief.

THE ANNUAL commencement of the University of Michigan will take place on June 22. Besides the usual ante-commencement ceremonies, the medical department will have a special program for its friends and the alumni.

THE MEDICAL friends of Dr. J. J. Kinyoun, Washington, D. C., tendered him a farewell dinner on the 21st instant, Dr. Kinyoun, who has been in charge of the department of hygiene of the marine-hospital service, having been ordered to San Francisco. At the dinner Dr. Joseph Taber Johnson acted as toastmaster; Drs. W. C. Woodward, W. W. Johnston, Stone and Kober responding. The evening closed with an interesting address by Surgeon-General Sternberg, who referred to the valuable services of Dr. Kinyoun in bringing the department of hygiene to its present valuable condition.

MAJOR D. U. APPEL, surgeon U. S. A., has fitted up a trolley street-car for use in bringing patients landed at Savannah, Ga., to his general hospital. The car carries fourteen litters in two tiers, one tier on a level with the seats, the other about two feet higher. The backs of the seats have been removed and wooden strips fastened to the tops of the seats at such a distance that the legs of the litters will fit snugly between them. The litters on the upper tier are supported by iron hooks hanging loosely and fastened to the posts with heavy bolts, the hooks catching the handles of the litters near the canvas. The car can be loaded and unloaded very easily.

THE OSTEOPATHS made a desperate effort in Nebraska during the recent session of the legislature of that State, to have a law passed permitting them to practice. The medical profession, however, was united in opposing this method of lowering the educational standard, and the osteopaths were defeated. One of these gentlemen has now been arrested for practicing medicine without a license, and the outcome of the trial will be of great interest to the profession of the State. If the defense made by the osteopaths holds good, it will do away with the medical law now in force there, the defense being that the law is unconstitutional. The physicians of Nebraska, however, are not worrying, but are as prepared to meet these faddists in this phase of the fight as they were in the legislature.

THE ANNUAL meeting of the American Medical Editors' Association will be held in Columbus, Ohio, on Monday, June 5, the day immediately preceding the opening of the meeting of the AMERICAN MEDICAL ASSOCIATION. The session will be called to order at 2 P.M., in the hall of the Y. M. C. A. building. The association, in addition to routine business, will listen to a paper entitled "The Ends and Aims of Medical Journalism," by Dr. J. D. Emmett, editor of the *American Gynecological and Obstetrical Journal*. In addition to this, the committee have proposed a brief symposium upon the subject, "The Editor and the Author—the Rights of Each as Regards Contributed Articles." The committee has requested Dr. G. H. Simmons, of the JOURNAL; J. Riddle Goffe, of the *Medical News;* G. M. Gould, of the *Philadelphia Medical Journal;* J. C. Culbertson, of the *Cincinnati Lancet-Clinic;* and Dunbar Roy, of the *Atlanta Journal-Record of Medicine*, to lead in this discussion. The annual dinner of the association is to be held at the Columbus Club at 6:30 P.M. Plates for the dinner, $2.00 each.

THE ANNUAL meeting of the American Laryngological Association was held in Chicago during the past week. About thirty-five members and twenty guests were in attendance, the mornings and afternoons being devoted to business sessions and the reading of papers, and the evenings given up to social functions. Dr. and Mrs. Casselberry entertained the members and guests at a reception one evening, and Drs. Hardie and M. R. Brown gave a lunch in their honor at the Chicago Athletic Club, with later a reception given by Dr. and Mrs. E. Fletcher Ingals at their home, followed by a tally-ho ride through the parks of the city. The following officers were elected at the meeting: president, Dr. Samuel Johnston of Baltimore; vice-presidents, Drs. T. A. de Blois of Boston and Moreau R. Brown of Chicago; secretary and treasurer, Dr. Henry L. Swain of New Haven, Conn.; Librarian, Dr. J. H. Bryan of Washington, D.C.; member of the council, Dr. Wm. E. Casselberry of Chicago. Place of meeting, Washington, D. C., in conjunction with the Congress of American Physicians and Surgeons, May, 1900. A report of the meeting will appear in future issues of the JOURNAL.

TROOPS FOR LUZON, P. I.—A general order, from Headquarters Department of the Missouri, Omaha, Neb., makes provision for the movement of the Sixteenth U. S. Infantry from duty in that department to the Philippine Islands. The movement will be by rail to San Francisco, and thence to Luzon on the transport *Grant*. Arrangements have been made so that the troops will arrive at San Francisco on the morning of May 29, and the loading of the baggage and the embarkation be completed on that day. The medical officers who will accompany these troops on the *Grant* are Major H. S. T. Harris, brigade surgeon, vols., and Acting Asst.-Surgeons Waller H. Dade, Cyrus D. Lloyd and Shannon Richmond. One hospital steward, two acting stewards and twelve privates of the hospital corps will leave with the command. Dr. Lloyd will accompany the Second Battalion from Fort Leavenworth to the seaboard, and Dr. Richmond the Third Battalion from Jefferson Barracks, Mo. The other medical officers and the members of the hospital corps will travel from Fort Crook, Neb., with the headquarters of the regiment and the First Battalion. The various staff departments are directed, within the limits of their respective spheres, to take all necessary steps to insure a prompt compliance with the provisions of the order and to see that every arrangement is made for the comfort and well-being of the command on this long journey, with a view to its arriving at its destination efficient in every respect.

# Public Health.

**Smallpox Among the Troops at Manila.**—On account of inefficient vaccination at San Francisco, Cal., prior to sailing for the Philippine Islands, a number of cases of smallpox appeared in certain regiments shortly after their arrival in Manila. These cases occurred mostly in men who had been visiting the huts of the natives, in many of which smallpox of a very malignant character was prevailing. Efforts were made to protect those whose vaccination records were not satisfactory, and the men were cautioned against the danger of exposing themselves to the infection. Cases, however, continued to occur, and on Nov. 19, 1898, Major-General Otis issued orders requiring commanding officers of regiments, battalions, companies and detachments, and surgeons in charge of hospitals, to take immediate steps to secure the vaccination or re-vaccination of all enlisted men under their supervision. Every enlisted man of the command, who had not been successfully vaccinated within the past six months, as shown by company records or within the personal knowledge of his officers, was required to be vaccinated at once (provided he was in physical condition to endure it), and should the operation not prove successful it was to be repeated, at intervals of two weeks, as often as in the judgment of the surgeon in charge of the organization it was deemed necessary to fully protect against smallpox; but not less than three unsuccessful vaccinations from date of this order would be recognized as sufficient protection. The chief surgeon at Manila, Lieut.-Col. H. Lippincott, U. S. A., has urged the establishment of steam laundries for the troops, one on the north, another on the south side of the Pasig River, and a third to do the washing for the hospitals, all to be operated by Americans, as he felt that there was great danger of the spread of infection in using Filipino labor for laundry work. All troops now arriving at Manila are vaccinated before or immediately after leaving the ship. Vaccinations done prior to Nov. 15, 1898, have been officially directed to be considered as unsuccessful, as also all vaccinations done with virus from San Francisco. The chief surgeon, in January and February last, procured virus from Japan and Saigon, but he especially commended the virus prepared by the board of health of the city of Manila. From September last to the end of March, 1899, there had occurred among the troops 151 cases of variola with 77 deaths, and 85 cases of varioloid with no death.

**Army Medical Reports from Manila, P. I.**—Reports dated March 31, 1899, from the chief-surgeon of the 8th Army Corps at Manila, state that the total number of United States troops killed or dead from wounds since Feb. 4, 1899, is 182, and that the number of wounded, is 847. Of the slightly wounded many were soon returned to duty. During the field service consequent on the Filipino outbreak our men have had every possible comfort, and the surgical attendance has been excellent. The medical department had made preparations for an expected attack on our forces. Litters, pouches and medical and surgical chests were in readiness, stimulants and easily prepared articles of food were on hand and the ambulance company was held on an active service footing. The transportation of the wounded was greatly facilitated by using the freight cars on the line from Caloocan and Malolos to Manila and by running the hospital boat up the river for those at San Pedro Macati and Pasig. Lieut.-Col. Lippincott, deputy surgeon-general, expresses himself so pleased in having been so well able to meet the wishes of the surgeon-general in regard to a sufficiency of medical supplies for the army. Rattan chairs and lounges purchased in Manila for use out of doors in shady places have been greatly enjoyed by patients who are able to be about. Pajamas also have been highly appreciated. The hospitals are the First Reserve Corps (Crosby's), the Second Reserve Corps (Keefer's), Convalescent (Owen's) and the District Hospital, now under the care of Acting Asst.-Surgeon Titus. Much labor has been expended on Crosby's hospital, which is now in excellent condition. It is fairly well ventilated and has been provided with lectric-lights. It was originally intended by the Spaniards to accommodate 800 patients, but it has not been filled to that extent by us. We have had that number on the rolls of the hospital at one time, but tents were used to extend the wards. The Second Reserve Corps Hospital is reported to be a fine establishment with ample and neatly kept grounds. It was built about two years ago as a seminary for young ladies. It accommodates 300 patients. The Convalescent Hospital on Corregidor Island accommodates 280. An ice machine was erected at Cavite soon after the arrival of the troops. The plant supplied the hospitals and several of the regiments. A new machine is now being installed near the First Reserve Hospital. Condensing plants have also been established: one at the First Reserve, one near the Spanish bridge, one at Binondo, one in the Malacanan district, one in Cavite and one in Iloilo. The plants were put up hastily when the water-mains were threatened, but although that danger is over, it has been considered judicious to continue the use of the distilled water. The food-supply is ample and varied. Fresh beef is issued seven days in ten and on these days two ounces each of rice, oatmeal and dried fruits are issued, when desired, in place of four ounces of the fresh beef allowance. Wounded Filipinos to the number of 256 were received into the hospitals during February and March. Forty five of these died. All received the best of care and treatment, and they seemed to appreciate the efforts made on their behalf. Suppuration was the rule in these cases, while among our wounded men it was rarely seen.

**Health Reports.**—The following cases of smallpox, cholera and plague have been reported to the surgeon-general of the United States Marine-Hospital Service for the week ended May 20, 1899:

SMALLPOX—UNITED STATES.

Alabama: Mobile, May 12, 2 cases.
District of Columbia: Washington, May 12 to 15, 3 cases.
Georgia: Savannah, May 9 to 16, 5 cases.
Illinois: Chicago, May 9, 2 cases.
Indiana: Evansville, May 6 to 13, 2 cases.
Kansas: Emporia, May 6 to 13, 2 cases, 1 death; Kansas City, April 29 to May 6, 32 cases, 8 deaths.
Kentucky: Louisville, May 4 to 11, 16 cases.
Louisiana: New Orleans, May 6 to 13, 9 cases; Shreveport, May 3 to 13, 4 cases.
Maryland: Steelton, near Baltimore, May 17, 4 cases.
Minnesota: St. Paul, April 29 to May 6, 1 case.
Missouri: St. Louis, January 21 to May 12, 65 cases.
New Mexico: Las Cruces, May 12, 19 cases.
New York: Borough of Brooklyn, April 29 to May 6, 1 case.
Ohio: Cleveland, May 6 to 13, 11 cases.
Pennsylvania: Allegheny, May 6 to 13, 2 cases; Johnstown, May 6 to 13, 1 case; Philadelphia, May 6 to 13, 1 case.
Rhode Island: Providence, May 10, 1 case.
South Carolina: Barnwell County, May 16, 3 cases; Beaufort (not verified), May 16, 3 cases; Clarendon County, May 6, 3 cases; Edgefield County, May 6, 5 cases.
Texas: Galveston, April 29 to May 6, 7 cases; Laredo, April 29 to May 6, 2 cases.
Virginia: Newport News, May 9 to 17, 11 cases; Norfolk, May 11 to 18, 16 cases; Portsmouth, May 11 to 18, 9 cases.
Wisconsin: Milwaukee, May 6 to 15, 2 cases.

SMALLPOX—FOREIGN.

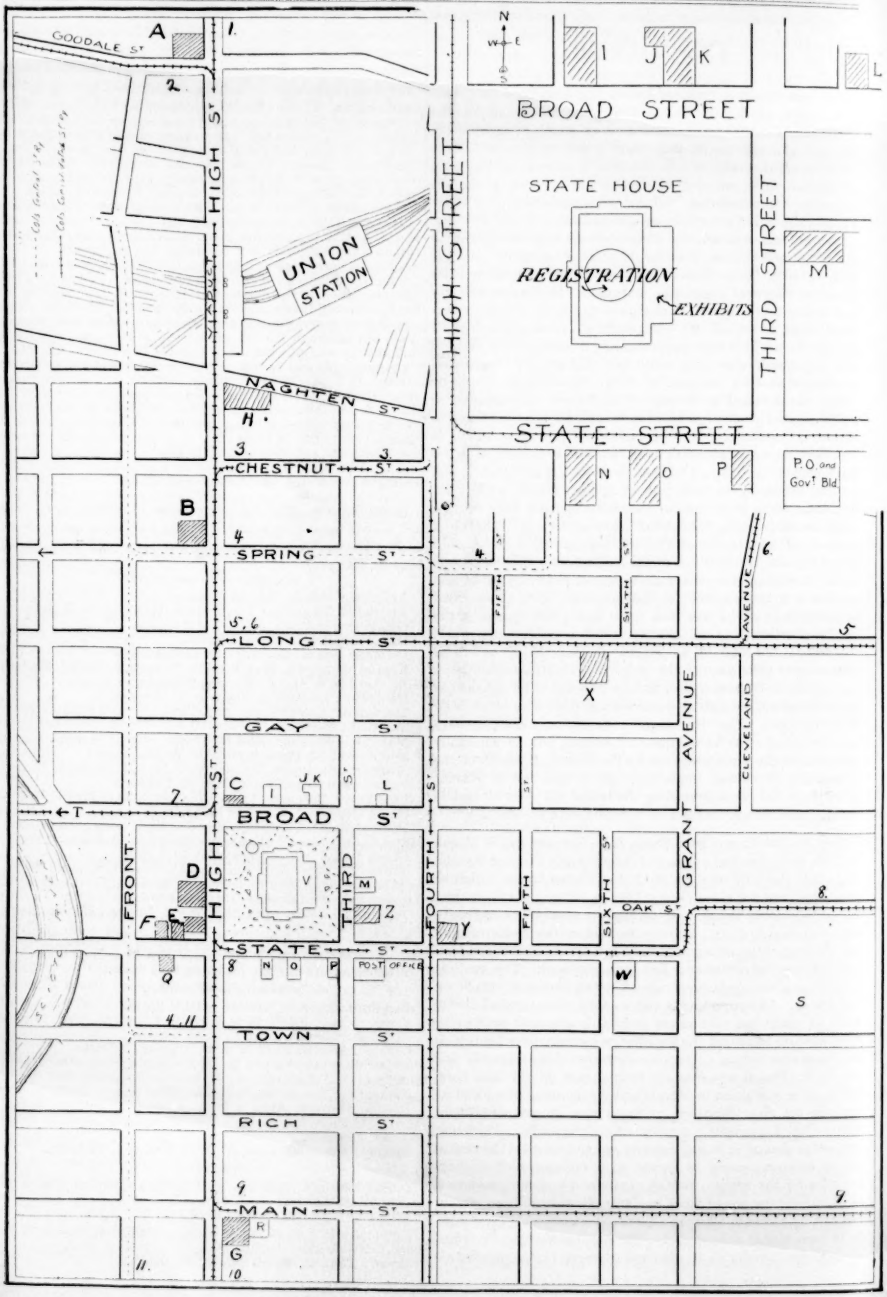
Belgium: Brussels, April 15 to 22, 1 death.
Egypt: Cairo, March 26 to April 22, 4 deaths.
England: London, April 15 to 22, 3 cases.
Greece: Athens, April 22 to 29, 21 cases, 8 deaths.
India: Bombay, April 4 to 18, 15 deaths; Calcutta, March 25 to April 8, 3 deaths.
Nicaragua: Bluefields, April 22 to 29, 1 case.
Russia: Moscow, April 3 to 15, 8 cases, 2 deaths; Odessa, April 22 to 29, 5 cases, 1 death; St. Petersburg, April 15 to 22, 18 cases, 3 deaths.
Turkey: Constantinople, April 17 to May 1, 5 deaths.

CHOLERA.

India: Bombay, April 4 to 18, 6 deaths; Calcutta, March 25 to April 8, 43 deaths.

PLAGUE.

India: April 4 to 10, 1199 deaths; Calcutta, March 25 to April 8, 266 deaths; Madras, March 25 to 31, 1 death.
Japan: Tamsui, March 8 to 29, 394 deaths.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TOWN ST
RICH ST
MAIN ST
FRONT
THIRD
FOURTH
FIFTH
SIXTH
GRANT AVENUE
CLEVELAND AVENUE
OAK ST
POST OFFICE
BROAD STREET
HIGH STREET
THIRD STREET
STATE HOUSE
REGISTRATION
EXHIBITS
STATE STREET
P.O. and Gov't Bld.

# Association News.

## AMERICAN MEDICAL ASSOCIATION.

*Meets in Columbus, Ohio, June 6, 7, 8, 9, 1899.*

LOCAL COMMITTEES.

COMMITTEE OF ARRANGEMENTS.

Starling Loving, Chairman.
F. F. Lawrence, Vice-Chairman.
H. M. Platter, Secretary.
Thomas C. Hoover, Treasurer.
Frank Winders, Assistant Secretary.

CHAIRMEN OF SUB-COMMITTEES.

Ways and Means—J. M. Dunham.
Reception—Frank Warner.
Entertainment—C. S. Hamilton.
Hotels—C. F. Turney.
Assembly Rooms—J. H. J. Upham.
Exhibits—N. R. Coleman.
Souvenir Book—F. W. Blake.
American Academy of Medicine—Edwin F. Wilson.
Medical College Association—Starling Loving.
Membership—J. U. Barnhill.
Registration—C. M. Taylor.
Rush Monument Fund—E. B. Fullerton.
Correspondence with State Medical Societies—D. N. Kinsman.
Foreign Correspondence and Visitors—C. A. L. Reed, Cincinnati.
Section Dinners—F. F. Lawrence.
Medical Journals—J. E. Brown.
Hospital Day—W. D. Hamilton.
Information—J. F. Baldwin.
State Medical Examiners—N. R. Coleman.
National Legislation—L. B. Tuckerman, Cleveland.
Department of Public Health—C. O. Probst.

PLACES OF MEETING—SEE MAP.

1. General Sessions, Grand Opera House, O.
2. Practice of Medicine, House of Representatives, south end State House.
3. Diseases of Children, Senate Chamber, north end State House.
4. Surgery and Anatomy, Congregational Church, K.
5. Obstetrics and Dis. of Women, Y.M.C.A. Auditorium, M.
6. Cutaneous Medicine and Surgery, Congregational Church, Sunday School Room, J.
7. Ophthalmology, Trinity House, L.
8. Laryngology and Otology, Trinity House, L.
9. Neurology and Medical Jurisprudence, First Presbyterian Church, P.
10. State Medicine, Committee Room, State House.
11. Stomatology, Committee Room, State House.
12. Physiology and Dietetics, Committee Room, Board of Trade, I.
13. Materia Medica, Pharmacology and Therapeutics, Council Chamber, City Hall, N.
14. National Confederation State Examining and Licensing Boards, Senate Chamber. (Monday 10 A.M.)
15. Medical Editors, Y. M. C. A., M.
16. American Medical College Association, House of Representatives. (Monday, 10 A.M.)
17. American Academy of Medicine, Chittenden Hotel Assembly Room, B.

TRANSFER COMPANY, PASSENGER RATES.

Depots to or from any hotel: omnibus, passenger with trunk, 25c.; carriage, with trunk, 50c.; coupe, without trunk, 25c.; with trunk, 40c. Hand luggage free.

Carriage for driving: first hour, $1.50; each additional hour, $1; coupe, per hour, 75c.

STREET CAR SERVICE—SEE MAP.

1. Protestant Hospital, Ohio Medical University; Ohio State University; North Columbus; Olentangy Park; Worthington.
2. Auditorium; Goodale Park; State University.
3. United States Barracks.
4. United States Barracks; Minerva Park; Westerville.
5. St. Anthony's Hospital; Franklin Park.
6. United States Barracks.
7. T. & O. C. Depot; Mt. Carmel Hospital; Cemeteries; Imbecile Asylum; Insane Asylum; Camp Chase.
8. St. Francis Hospital; Starling Medical College; Children's Hospital.
9. Capital University; Bullit Park.
10. South Columbus; City Park; Driving Park.
11. Baseball Park.

Street car fare, 5c.; tickets, 6 for 25c. No transfers between the two companies, but universal between the different lines of each company for one cash fare.

All hotels are on direct street car lines from Union Depot.

All lines reach the State House square.

HOTEL RATES—SEE MAP.

Park, A, $1.50 to $2.50. Chittenden, B, $2.50 to 4. Smith's, C, (European), $1.50. Neil, D, $2 50 to $3 00. Goodale, E, (European) 75c to $1.00. American, F, $2.00. Emerson, F, $2.00. Great Southern, G, $2 50 to $4.00. Davidson, H, $2.00. Corrodi, Q, $2.00. Normandie, X, $1.50. Norwich, Y, $1.50. Vendome, Z, $1.50.

DIRECTORY—SEE MAP.

A, Park Hotel.
B, Chittenden Hotel.
C, Smith's Hotel.
D, Neil House.
E, Goodale.
F, American and Emerson.
H, Davidson House.
I, Board of Trade.
J, Sunday-School Room Congregational Church.
K, Congregational Church.
L, Trinity House.
M, Y.M.C.A.
N, City Hall.
O, Grand Opera House.
P, First Presbyterian Church.
Q, Corrodi Hotel.
R, Great Southern Theater.
S, Deaf and Dumb Asylum.
T, T & O. C. Ry. Depot.
V, Exhibit Hall.
W, Starling Medical College & St. Francis Hospital.
X, The Normandie.
Y, The Norwich.
Z, The Vendome.

For further information address the chairman of the appropriate sub-committee, or

J. F. BALDWIN, M.D.,
Chairman Committee on Information.

**Section on Neurology and Medical Jurisprudence.**—Attention of the members of this Section is called to the fact that the program of the Section, for the Columbus meeting, appeared in the JOURNAL, May 20, p. 1131, but was omitted from the "Contents" on the title-page.

**General Business Committee.**—The first meeting of this committee will be held on Monday afternoon, June 6, at 5 o'clock, in the Columbia Rifles Armory, seventh floor of the Great Southern Hotel, Columbus, Ohio; subsequent meetings in the same place at 5 P.M. on each day of the meeting. It is very important that all the members of the committee should attend the meetings, in order that the business of the ASSOCIATION may be properly transacted. L. Duncan Bulkley, M.D., secretary General Business Committee.

**Railroad Rates for the Columbus Meeting.**—The committee on transportation of the AMERICAN MEDICAL ASSOCIATION presents the following, as the final rates agreed upon in the different territories for the Columbus meeting:

The New England Passenger Association, Trunk Lines Association, Southwestern Passenger Bureau and Southeastern Passenger Association grant a rate of one and one-third fare for the round trip on certificate plan.

The Central Passenger Association has granted a one-fare rate for the round trip. The Western Passenger Association has granted a one-fare rate plus $2 for the round trip. In the latter territory, where the rate for passage to the eastern gateway is $6 or less, the rate will be one and one-third fare for the round trip, provided that where one-third fare to Chicago is $2 or less, 50 cents additional will be added to the cost for return transfer. (See JOURNAL, May 6, p. 1012.)

Tickets will be on sale in the various railroad territories on time, in advance, sufficient for reaching Columbus, the place of meeting, by continuous uninterrupted trip. Delegates should notify ticket agents in advance, in order to secure the certificate platform.

H. L. E. JOHNSON, M.D.,
Chairman Transportation Committee.

**Resolutions on Association and Colleges.**—The following resolutions were moved by Dr. A. A. B. Hays, president of the Louisiana State Medical Society, seconded by Dr. H. S. Cocram, president of Louisiana State Board of Medical Examiners, and passed unanimously by the Louisiana State Medical Society, May 17, 1899:

WHEREAS, The AMERICAN MEDICAL ASSOCIATION, at its last

annual session, June, 1898, adopted a resolution, that: "hereafter no professor or other teacher in nor any graduate of any medical college in the United States—which shall, after Jan. 1, 1899, confer the degree of doctor of medicine or receive such degree on any conditions below the published standard of the Association of American Medical Colleges—shall be allowed to register either as delegate or permanent member of this ASSOCIATION."

*Resolved*, That the Louisiana State Medical Society strongly protests against this resolution as unfair and unjust for the following reasons:

1. Said resolution is in conflict with the Constitution of the American Medical Association in regard to the requisites for membership.

2. This constitution should not be so amended, as to membership, that professors and teachers would be required to violate their contract with students to graduate them at the end of the third course; that professors and teachers on the one hand and graduates on the other would be discredited because they honorably maintain their mutual obligations.

3. Said resolution threatens and boycotts many of the most reputable members of the American Medical Association and of the medical profession, and thereby greatly encourages discord and disunion; such action is not in harmony with the tolerant and forbearing spirit of the medical profession and, heretofore, of the American Medical Association, and it is not by such means that the Association has gained the power it now threatens to abuse.

4. The adoption by the Southern Medical College Association of the three-year course in 1893 and of the four-year course in December, 1898, gives conclusive proof of the commendable determination of these colleges to advance the interests of medical education as rapidly as their environment justifies.

5. During the many years prior to 1890, the conditions surrounding the great majority of the colleges whose representatives urge invidious action against Southern medical colleges were far superior to the conditions still confronting the latter; and yet the former persistently maintained only a two-year course. The Southern States have been at great comparative disadvantage as regards such important influences as public wealth and education, density of population and the deficiencies and needs of sparsely inhabited States. Hence, Southern medical colleges deserve, not condemnation, but the very highest commendation for the unprecedented progress they have made during the past eight years; and the American Medical Association should be foremost in manifesting its appreciation of this progress and in exercising the sympathy and the wisdom indispensable to securing the support of every reputable physician in every section of our country, thereby best promoting its own future influence and progress.

## Miscellany.

**Examination of Recruits for the Army.**—The secretary of war has directed the issue (May 15, 1899) of a circular bearing on the medical examination of candidates for enlistment in the army. It states that complaints of the inferior quality of recruits enlisted indicate a lack of care on the part of some recruiting officers and examiners of recruits, in accepting applicants for enlistment, men having been found upon arrival at their regiments to be poorly developed, or to have serious defects which existed prior to enlistment, and should have been discovered by the exercise of proper care in conducting the examination preceding the enlistment. The standard of requirements has not been lowered. The army regulations and the published instructions governing the examination of applicants for enlistment must be strictly observed, and no recruit be accepted who is not qualified in all respects to perform the duties of a soldier. There may sometimes be desirable applicants whose examination will disclose some defect not of a serious nature, which in the opinion of the recruiting officer and that of the examiner of recruits will not impair the efficiency of the men as soldiers. Such cases may be reported to the adjutant-general for decision, with a statement of the nature and extent of the defect and with appropriate recommendation. The paragraph of the regulations defining the responsibilities of recruiting officers is then cited, and instruction is given that contract-surgeons acting as examiners of recruits, who do not prove to be careful and competent, should be reported to the surgeon-general for annulment of their contracts. A recruiting officer who employs a civilian physician should make careful selection, and should retain no one in such capacity who does not prove to be fully competent.

**Medical Practice in Cuba.**—A special correspondent (*Med. Standard*, May) gives a number of interesting facts about medicine and pharmacy in Cuba. The physician under Spanish rule was burdened with exactions, but his position was generally good. Specialties are rare, family physician and general practitioner is the rule. The pharmacist was under the same restrictions and burdens. The climate of Cuba is healthiest in the eastern province, where yellow fever is rare. The summer season is enervating and sometimes dangerous on account of the excessive heat and moisture breeding miasma, but from November to May it is very tolerable and the heat rarely oppressive. Yellow fever is said to have been introduced as late as 1761. Its prevalence is attributed mainly to neglect of hygiene and sanitary rules. Dysentery is fatal to many European colonists, while cholera frequently decimates the blacks, leaving the whites untouched. Malaria is the reigning disorder and frequently a serious complication of traumatism, etc. Diarrhea is also common. Anemia is frequent among female creoles, owing to a too vegetable diet. Liver complaints, except from excesses, are, contrary to the usual opinion, rare. Tetanus was formerly considered common, but is always due to infection. Infantile tetanus is very common among the negroes, owing to their careless habits; about 15 per cent. die with it. Skin diseases and atonic dyspepsia are other common ailments. Dr. H. S. Caimanero, of the U. S. marine-hospital service claims that Cuba is naturally as healthy as any other country in the world, and with certain precautions foreigners can live there in comfort and safety. The Cubans are physically inferior to their Spanish ancestors, a fact that has been attributed to the climate, but may be due more to the custom of too early marriage. Intellectually they have not deteriorated to the extent that the French and other races have in the West Indies.

**A Souvenir of Dhomokos.**—On this side of the Atlantic we must regard it as rather late in the day for an army medical man to discuss the conditions existing during the Turko-Grecian war. The events of that short but interesting struggle in May, 1897, have been thrown into the background for us in the United States by the interposition of scenes of battle and suffering, with our own flag waving over the victorious lines of attack. In Europe, however, the Turko-Grecian affair still retains its status as "the last war." Médecin-Major Hans Daae, of the Norwegian army, may therefore be considered as dealing with recent events in submitting to the world his "Notes et Impressions de la Guerre Turco-Grecque," even if he had not an important end in view in delaying his publication to this time, his object being to invite the attention of the International Peace Conference to the frightful and unnecessary suffering which came under his observation, notwithstanding the existence of the Treaty of Geneva and of an international Red Cross society. His notes are dictated by a heart full of sympathy for the stricken and uncared-for soldier. The mantle worn by Henri Dunant, at Solferino, in 1859, seems to have fallen on his shoulders at Dhomokos, in 1897. He brings scenes of misery into strong relief by a few pen strokes, but in a manner suggestive of the heart-wrung and sympathetic layman rather than of the army medical officer.

Nicholas Senn has given us a view of this war from the Grecian lines (see JOURNAL, vol. xxix, 1897). We have to thank Médecin-Major Daae for, so far as we are aware, the only information concerning the first-aid and field surgery on the Turkish side. This officer was sent by his government to the

seat of war to observe and report. Every facility was afforded him by the Ottoman officers. As the Turkish army had been organized and equipped in its combatant branches under German influences, he expected to find that these influences had operated also in promoting the efficiency of the sanitary service. As the Ottoman government had adopted the Articles of the Geneva Convention, over thirty years ago, he expected to find an ample provision for the care of the wounded. On his way to the front he saw some general hospitals, permanent in character and evidently unconnected with the army then on active service: but, to his surprise, nowhere could he discover any indication of a sanitary corps belonging to that army, neither with the regiments encountered on the march nor in the towns he passed through. A field hospital was at last found in a house near Pharsalos. The courtyard was crowded with wagons and wounded men, some of the latter lying in the shade of the house, others where they had been laid down when unloaded from the wagons. The ground floor, somber and damp, was strewn with wounded. In the rooms on the upper floor there was some provision for the comfort of patients, each having a mattress, pillow and covering. One surgeon and two assistants were exhausted with twenty-four hours of continuous effort to care for the hundreds requiring attention. Continuing his journey to the front, a train of wounded was met, but such a train! His pen refuses to dwell on its horrors, which will never be effaced from his memory. Rude wagons were piled with men apathetic from pain, thirst, and exhaustion, their wounds undressed, their fractures, even, unsupported. These men had lain on the field of Dhomokos for twenty-four hours and were now en route to Pharsalos, twenty-five kilometers distant, the road difficult and the heat stifling, for such care as could be given them by the exhausted surgeons at the hospital there. Later he found that 1400 Turkish soldiers had fallen at Dhomokos where there were neither stretchers nor suitable wagons and where the only aid was given by uneducated men, "panseurs" or bandagers, who helped to gather the wounded for conveyance to the hospitals by train, as already seen. The Greeks left few of their wounded on the field, but such as fell into Turkish hands could complain of no worse treatment than was given to the Turks themselves.

This want of preparation by the military authorities of the Ottoman forces for the care of the wounded afforded the very opportunity which it was the object of the Red Cross societies to meet; but they were not present in sufficient strength for the emergency. Two small hospitals, one at Pharsalos, the other at Larissa, were established by the Ottoman society, one by the Red Cross of Russia at Pharsalos, and one by the German society at Yildis Kiosk. Aseptic surgery was notable only by its absence during the short campaign.

To prevent a repetition of these sufferings on perhaps a greater scale in future wars, certain suggestions are made: 1. The service of the medical department of the army should be as complete and up-to-date as that of the divisions of the line. 2. No State should declare war unless certain of its ability to transport, treat and care for its wounded, efficiently. 3. The great powers should prevent petty States from going to war if the sanitary service of the latter is inefficient. 4. The Red Cross societies should be broadly international and not actuated merely by national or political sympathies. These are the propositions which Major Daae desires to bring to notice, but they constitute too extensive a subject for present discussion. Our immediate object is merely to make note of the impressions made on the official representative of the Norwegian medical department by what he saw of medical arrangements during the Turko-Grecian campaign.

### Washington.

HEALTH OF THE DISTRICT.—The report of the health officer for the week ended May 13 shows the total number of deaths to have been 93; 45 were white and 50 colored. There were 5 fatal cases of cerebrospinal meningitis and 1 of diphtheria. At the close of the week there were 18 cases of smallpox, 32 of scarlet fever and 13 of diphtheria under treatment.

CENTRAL DISPENSARY AND EMERGENCY HOSPITAL.—The vacancy in the hospital's house staff, caused by the expiration of the term of Dr. H. F. Mohart, results in the promotion of Drs. J. L. Adams and W. E. Whitson as resident physician and first assistant resident physician. Dr. W. C. William, who successfully passed the recent competitive examination, has been appointed second assistant resident.

GEORGETOWN MEDICAL SCHOOL.—The annual commencement of the medical department of the Georgetown University was held on the 15th instant. Diplomas were awarded to a class of nine. Dr. Daniel J. MacCarthy passed first in the competitive examination and was appointed resident physician of the Georgetown University Hospital.

DR. BELT MARRIED.—Dr. Edward Oliver Belt, the secretary and one of the founders of the Episcopal Eye, Ear and Throat Hospital, was married on May 18 to Miss Emily Walker Norvell.

### Philadelphia.

MEDICAL SYMPOSIUM.—The Philadelphia Alumni Society of the University of Pennsylvania held a symposium on the evening of May 20, at which time Mayor-elect Ashbridge made an address.

CUT IN EXPENSE.—The State Medical Council of Pennsylvania had included a bill of $2000 for necessary expenses, but Governor Stone has reduced the amount to $1000 as a measure of economy.

DR. WILEY INJURED.—Dr. Wiley while out driving recently, had the misfortune to be thrown quite violently to the ground, alighting on the back. Dr. Eugene Wiley, Jr., anticipates no serious injury.

RUSH HOSPITAL.—The Rush Hospital for Consumptives has been materially improved by the addition of two new wards, which were opened on May 17. The presentation speech was made by Dr. J. H. Tyson. The additions consist of two three-story buildings, containing a sun parlor, two prescribing rooms, a waiting room, laundry and two wards. The building will now accommodate forty patients.

BANQUET.—May 19, the alumni of the Medico-Chirurgical College tendered a banquet to the graduating class. The following toasts were responded to: "The Alumni," by Dr. Charles H. Gubbins; "The Medico-Chirurgical College," by Dr. W. Easterly Ashton; "Philadelphia as a Medical Center," by Mayor-Elect Ashbridge; "The AMERICAN MEDICAL ASSOCIATION," by Dr. Joseph M. Mathews; "The University of Pennsylvania," by Dr. James Tyson; "The Jefferson Medical College," by Dr. H. A. Hare.

BOARD OF HEALTH.—In accordance with the bill recently passed, work has begun in reorganizing the board of health of Philadelphia. A board will be created consisting of three members, of which the presiding officer shall be the chief of the bureau, and two other members will be chosen by the mayor.

NEW ALMSHOUSE.—Since the money of the loan bill, which carries with it appropriations of $3,200,000 for the improvement of the water-supply and $200,000 for the almshouse, has become available after such a long delay, it is now purposed by some to establish a new almshouse quite remote from the city. This would include the removal of the insane department, and thus leave the Philadelphia Hospital on its present site to be extended to such a degree as to make it the finest institution of the kind in the world. This was the plan which the late Dr. William Pepper contemplated at the time the loan bill was framed. The insane department is in such an overcrowded condition that relief is absolutely demanded.

ALUMNI BANQUET—The twenty-ninth annual banquet of the alumni of the University of Pennsylvania will be tendered to the graduating class June 14. It is desired to make this meet-

ing a representative one, and it is hoped that members of the different classes will be present, so that a reunion may be consummated. The toasts to be responded to are as follows; "The University," by Provost Harrison; "The Trustees," by Dr. J. C. DaCosta; "Jefferson College," by Dr. J. Chalmers Da Costa; "The Medico-Chirurgical College," by Dr. W. L. Rodman; "The Medical Department," by Dr. H. C. Wood; "The Dental Department," by Dr. Edwin T. Darby; "The Clergy," by Rev. Floyd Tomkins. It is hoped that Dr. S. Weir Mitchell will be on hand to respond to a toast.

MORTALITY STATISTICS.—During the week just closed the number of deaths was 378, a decrease of 49 over the previous week, and a decrease of 5 over the corresponding period of last year. Of the total number of deaths, 96 occurred in children under the age of 5 years.

# Questions and Answers.

### LIFE INSURANCE EXAMINERS.

OMAHA, NEB., May 12, 1899.

*To the Editor:*—Can you give me any information about the congress mentioned in the enclosed (Internat. Congress of Physicians, connected with life insurance companies, Berlin, Sept. 25-30, 1899) clipping? It strikes me as being a good thing, and I would like to know more about it.

Please give me the name and address of journals published in the interests of life insurance examiners, also the names of the latest works on life insurance and their publishers. IRA W. PORTER, M.D.

ANSWER:—The item enclosed is correct, in so far as a call was issued for the congress last December. Any further information required can be obtained direct by corresponding with Dr. Poels, 2 Rue Marie Therese, Brussels.

The *Medical Examiner* is a medical life insurance journal of this country. There is an actuary's journal published in England, which sometimes publishes medical papers, but we have not the title.

The recently published American handbook for life insurance examiners is Keating's "How to Examine for Life Insurance," (Philadelphia: W. B. Saunders, 3d edition, 1898). Another work on life insurance examiners is by Chas. F. Stillman (New York: Vail & Co.). The most recent English work on the subject of which we are aware is that by Pollack & Chisholm, "Medical Handbook of Life Insurance" (London; Cassell & Co., 1895). There are many others.

# The Public Service.

**Movements of Army Medical Officers** under orders from the Adjutant-General's Office, to and including May 18, 1899:

Azel Ames, major and brigade surgeon vols., honorably discharged to take effect June 30, 1899.

Lomax S. Anderson, lieutenant and asst.-surgeon 5th U.S. Vol. Inf., sick leave granted.

Wm. B. Banister, captain and asst.-surgeon U.S.A., leave of absence granted.

Harry A. Barnhardt, acting asst.-surgeon, from Washington, D. C., to Camp Meade, Middletown, Pa.

Ezequiel de la Calle, major and brigade surgeon vols., honorably discharged to take effect June 30, 1899.

Peter J. A. Cleary, lieut.-col. and deputy surgeon-general U.S.A., member of a retiring board at Ft. Sam Houston, Texas.

J. J. Curry, acting asst.-surgeon, leave of absence granted.

Elmer A. Dean, lieutenant and asst.-surgeon U.S.A., from Ft. Snelling, Minn., to St. Paul, Minn., as attending surgeon and examiner of recruits.

Augustus A. DeLoffre, major and surgeon U.S.A., to appear before a retiring board convened at Ft. Sam Houston, Texas.

Jas. F. Dunshie, acting asst.-surgeon, from Camp Meade, Middletown, Pa., to Havana, for assignment in the Div. of Cuba.

Basil S. Dutcher, lieutenant and asst.-surgeon U.S.A., member of a board at Ft. Leavenworth, Kan., to examine persons designated for appointment as second lieutenants in the army.

F. M. Ferrer, acting asst.-surgeon, leave of absence granted.

Jas. D. Glennan, captain and asst.-surgeon U.S.A., relieved from duty in the Depts. of Matanzas and Santa Clara, to rejoin his proper station, Ft. Myer, Va.

Luther B. Grandy, acting asst.-surgeon, from Atlanta, Ga., to San Francisco, Cal., for transportation to the Philippine Islands and duty in the Dept. of the Pacific.

Geo. D. Groff, major and brigade surgeon vols., honorably discharged to take effect June 30, 1899.

Chas. L. Heizmann, major and surgeon U.S.A., member of a retiring board at Ft. Sam Houston, Texas.

Randal L. Hunter, major and brigade surgeon, honorably discharged to take effect June 30, 1899.

Jas. M. Kennedy, captain and asst.-surgeon U.S.A., from mustering-out duty at Augusta, Ga., to the Presidio of San Francisco, Cal., for duty with the 4th U.S. Cav.

Henry S. Kilbourne, major and surgeon U.S.A., member of a board convened in New York City to examine officers for promotion.

Thos. R. Marshall, acting asst.-surgeon, leave of absence granted.

Walter D. McCaw, captain and asst.-surgeon U.S.A., in addition to his duties at Ft. Porter, N. Y., to examine recruits at Buffalo, N. Y.

Clarence B. Millhoff, lieutenant and asst.-surgeon, leave of absence granted.

John E. Morris, acting asst.-surgeon, from New York City to Indianapolis, Ind., reporting by letter to the surgeon-general.

Alex. Nettleroth, acting asst.-surgeon, from Ft. Thomas to Louisville, Ky., reporting by letter to the surgeon-general.

Seaton Norman, acting asst.-surgeon, from New Orleans, La., to Havana, for assignment in the Div. of Cuba.

Chas. E. Peyton, acting asst.-surgeon, from Camp Mackenzie, Augusta, Ga., to Richmond, Va., reporting by letter to the surgeon-general.

Wm. E. Purviance, captain and asst.-surgeon U.S.A., former orders modified so as to relieve him from duty at the general hospital, Ft. McPherson, Ga.; to report to Major P. H. Ray, 8th U.S. Inf., at Washington, D. C., to accompany that officer to Alaska, for asssignment as chief surgeon District of Northern Alaska.

Jas. Beagles, acting asst.-surgeon, from Plattsburg Bks., N. Y., to Vancouver Bks., Wash., for assignment in the Dept. of the Columbia.

Edw. O. Shakespeare, major and brigade surgeon vols., honorably discharged to take effect June 30, 1899.

Wm. Stephenson, captain and asst.-surgeon U.S.A., member of board in New York City to examine officers for promotion.

Owen W. Stone, acting asst.-surgeon, relieved from the Dept. of Santiago, and on the expiry of his present leave of absence to proceed to Havana, for assignment in the Div. of Cuba.

Baen Street, acting asst.-surgeon, from Camp Columbia, Havana, Cuba, to Washington, D. C., reporting to the surgeon-general.

Geo. H. Torney, major and surgeon U.S.A., member of board at Ft. Leavenworth, Kan., to examine persons designated for appointment as second lieutenants.

Victor C. Vaughan, major and brigade surgeon vols., honorably discharged to take effect June 30, 1899.

Roy S. Wilson, acting asst.-surgeon, assigned to duty at Camp Meade, Middletown, Pa.

Robt. H. Zauner, acting asst.-surgeon, from Washington, D. C., to Camp Meade, Middletown, Pa.

**Movements of Navy Medical Officers.**—Changes in the medical corps of the U.S. Navy for the week ending May 20, 1899.

Asst.-Surgeon S. B. Palmer, resignation accepted from May 15.

### CHANGE OF ADDRESS.

Bruhaker, P. R., Columbus to Bloomdale, Ohio.
Blount, R. T., Galveston to 119 Kingsbury Street, San Antonio, Texas.
Brasselton, B. E., Galveston to Weatherford, Texas.
Campbell, C. A. R., New Orleans, La., to San Antonio, Texas.
Carlaw, C. W., Minneapolis, Minn., to Campbellford, Ont., Can.
Curtis, L., Chicago to Big Rapids, Mich.
Currey, E. M., Trinidad to Gray Creek, Colo.
Chapin, C. W., Chicago to Wilmette, Ill.
Dearholt, H. E., Chicago to 560 Maryland Ave., Milwaukee, Wis.
Davis, W. C., Denver, Colo., to Chicago.
Dudgeon, H. R., Galveston to Maxwell, Texas.
Durham, C. E., Galveston to Dublin, Texas.
Estes, J. M., Galveston to Clyde, Texas.
Earl, A. L., New Orleans to Lindsay, La.
Elmore, R. D., Nortonville to Hiawatha, Kan.
Earll, R. W., Milwaukee to Columbus, Wis.
Flood, Jno., 237 E. Erie to Oak & N. Clark Sts., Chicago.
Farline, H., Chicago to Los Angeles, Cal.
Frisby, E. G., 794 Sutter to 1610 Van Ness Ave., San Francisco, Cal.
Flynn, P. J., Omaha to O'Neill, Neb.
Gibbs, M. D., Gillett to Whitehorn, Colo.
Greenwood, W. N., Galveston to Stoneham, Texas.
Grier, M. J., Philadelphia to 2825 Fairview Ave., Denver, Colo.
Graeson, H. B., Grafton to Kensett, Ia.
Hogan, D. S., Omaha to North Loup, Neb.
Harris, R. A., 432 Claremont to 992 Harrison St., Chicago.
Hisom, H. T., Chicago to 264 Olive Ave., Redlands, Cal.
Huff, W. J., Findley to Shelbyville, Ill.
Hoy, W. P., Richmond to Petersburg, Va.
Hasson, E., Chicago to Lewistown, Ill.
Hinde J. R., Chicago to Lewistown, Ill.
Houghton, W., 170 Jos. Campau to 704 Champlain St., Detroit, Mich.
Johnson, R. B., Chicago to Norfolk, Neb.
Kirkbride, M. F., Philadelphia to Spring Lake Beach, N. J.
Kellogg, G. M., Keokuk, Ia., to 314 North Clark St. Chicago.
Lackie, G. A., 571 Lincoln Ave., to 383 Dearborn Ave., Chicago.
Lamm, I. W., Richmond, Va., to Silver City, N. C.
Long, W. E., Chicago to Rockford, Ia.
Litchfield, L., 4634 to 5431 5th Ave. E. E., Pittsburg, Pa.
Long, D., 535 W. Monroe to Wabash & 31st St., Chicago.
Lehman, A. L., Philadelphia to Mulan, Idaho.
McDougall, G. T., Milwaukee to Eau Claire, Wis.
Minor, E. B., Orange to Traverse City, Mich.
McKinley, J. F., 3457 State to 34 Washington St., Chicago.
Marvel, H., 134 N. 18th St., to 4612 Cedar Ave., Philadelphia, Pa.
Madajesky, E. H., Appleton, Wis., to Bessemer, Mich.
McSwain, D. L., New Orleans, La., to Funiak Springs, Fla.
Marshall, J. S., Blossom to Paris, Texas.
Nehr, R., Cincinnati to 1108 E. 5th St., Dayton, O.
Ostreicher, Philadelphia to Bethlehem, Pa.
Porter, W. A., Topeka to Lyndon, Kans.
Price, E. M., Chicago to Rushville, Ill.
Payment, C. R., 208 Woodward Ave., to 7 Wilcox Ave., Detroit, Mich.
Pomeroy, H. M., Lankershim Boul., to W. Washington, Los Angeles, Cal.
Ramsdell, L. S., 871 Jackson Boul., to 32 Stanley Terrace, Chicago.
Riemens, L. A. N., Chicago to Holland, Mich.
Rix, 403 McCague Bld., to St. Joseph Hospital, Omaha, Neb.
Roberts, A., 3706 Williams St., to Nevada Bld., Denver, Col.
Rumsey, F. W., 1618 Penn Ave., to 1735 Williams St., Denver, Colo.
Richstein, Oakland, Cal., to St. Louis, Mo.
Stubbs, F. G., 576 43d St., St., to 4256 Grand Boul., Chicago.
Sapp, C. E., Jelloway to Mt. Vernon, Ohio.
Sullivan, E. P., 148 S. Oakley Ave., to 2645 N. Ashland Ave., Chicago.
Shupp, E. A., Philadelphia to Broadhurstville, Pa.
Van der Veen, 554 to 381 Grandville Ave., Grand Rapids, Mich.
Vedeler, C., Chicago to Locust, Ia.
Watson, F. Y., Scarsboro, Ia., to Roberts, Wis.
Waugh, W. T., 103 State St., to 1416 E. Ravenswood Park, Chicago.
Wetherby, B. J., 65 N. Franklin to 69 N. Franklin St., Wilkesbarre, Pa.
Weber, C. E., 518 W. Adams to 348 55th St., Chicago.
Whitney, M. H., Dekum to Oregonian Bld., Portland, Ore.
Yeamans, H. W. Seattle, Wash., to Dawson, N. W. T.
Zerzan, G. F., Chicago to Schuyler, Neb.